

749

AGTCCGGGGG ACCTTTTAG TCGGTAGATT GAGATTGCAA ACAAATCTGC ATCTACATTG	4860
AAAGCTTAAT TTCTAATAAT TGAAAAAATC GAATGAAAAA TTTCTTACCT TCATTCACAG	4920
AGCTCGATTT CAGAGCTCTT TTTGCTAGCT TATTCTACT TTTCTGAATT TCGAAAAAGA	4980
AATGTAAGCG TTTGATAGAT TTACAAAAAG ATTGTATAAT AGGGATAAGA ATAGAAAAGG	5040
AGAAGTCTCA TGGCAGTTAA AGATTTATG ACCCGCAAGG TAGTTTATAT TAGTCCAGAT	5100
ATAACAGTAT CTCATGCAGC AGATTTGATG AGAGAGCAAG GTTGCACCG TCTGCCTGTT	5160
ATCGAAAATG ATCAATTAGT TGGTTGGTG ACTGAGGGAA CCATTGCACA AGCAAGTCCA	5220
TCTAAAGCAA CAAGTCTTTC TATCTATGAG ATGAATTATC TTCTGAATAA GACAAAAGTA	5280
AAAGATGTCA TGATTCGCGA TGTTGTCACT GTCTCAGGCT ATGCTAGTCT AGAAGATGCA	5340
ACTTATCTGA TGTTGAAAAA TAAGATTAGT ATTCTCCCTG TCGTAGATAA CCATCAAGTA	5400
TACGGAGTTA TTACTGACCG TGACGTTTC CAAGCCTTC TTGAAATTGC AGGTTATGGC	5460
GAAGAAGGGA TTCGTGTACG CTTTGTACA GAAGATGAAG TTGGTGTCT TGGAAAAATT	5520
TTTCCTTGA TTGTTAGAAGA AAATTGAAT ATCTCCATA CAGTCAATAT TCCGCGTAAG	5580
GATGGTAAGG TGATTATCGA AGTGCCTAAC GATGGATCAA TTGATTTACC AGCCTTGAAA	5640
GAAAATTTG AAGCAAATGG TATTCAAGTG GAAGAAATCG CTCGCACCTTC AGCAAAAGTC	5700
TTGTAAGAAG GGAAGCCAA AGGCTCTTT TTTCATGAAA AGGGGATTAG AGCAAAAGAT	5760
GGAAAGAAAT GATAAAATAT GCTATAATGAA AATAATGTA AAAAGGAGTA TTTATGGACA	5820
TTTCAGTAAT TCGTCAGAAA ATTGACGCAA ATCGTAAAA ATTAGCTTCT TTCAGGGGT	5880
CTCTTTGACC TCGAAGGGCT AGAGGAAGAG ATTGCCATCT TGGAAAACAA GATGACAGAA	5940
CCTGATTTTT GGAACGATAA TATTGGGCC CAAAAAACGT CGCAAGAATT AAATGAATT	6000
AAAAACACTT ACAATACCTT CCATAAGATG GAAGAGTTGC AGGATGAAGT CGAAATT	6060
TTGGATTTTT TGGCTGAAGA CGAGTCAGTG CATGATGAAC TGGTAGCGCA GTTAGCCGAA	6120
CTTGATAAGA TAATGACCAAG CTACGAGATG ACTCTACTCT TGTCAGAAC TTATGACCA	6180
AACAATGCCA TCTTGGAAAT CCATCCAGGT TCTGGTGGTA CTGAGGCGCA GGACTGGGT	6240
GATATGTTGC TTCGTATGTA TACTCGTTAT GGTAAATGCTA AAGGTTTAA AGTGGAAAGTG	6300
TTGGATTACC AAGCAGGTGA TGAGGCTGGT ATTAAGTCGG TAACTTTATC ATTTGAAGGG	6360
CCTAATGCCT ATGGTCTCCT CAAGTCAGAA ATGGGTGTTG ACCGCTTAGT GCGAATCTCA	6420
CCATTTGACT CTGCCAAACG TCGCCATACC TCTTTCACAT CTGTAGAAGT GATGCCAGAA	6480
TTGGATGATA CTATTGAAGT GGAAATCCGT GAAGATGATA TCAAGATGGA TACCTCCGT	6540

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TCAGGTGGTG	CCGGTGGACA	AAACGTCAAT	AAGGTTCAA	CAGGTGTACG	TTTAACCCAC	6600	
ATTCCAAC	TG	GAATTGTTGT	CCAATCAACA	GTAGATCGTA	CCCAGTATGG	AAATAGAGAT	6660
CGTGC	CATGA	AGATGTTGCA	GGCTAAGCTC	TATCAAATGG	AGCAAGATAA	GAAGGCTGCG	6720
GAGGTAGATT	CTCTCAAAGG	TGAGAAAAAG	GAGATCACTT	GGGGAAAGCA	AATCCGTTCT	6780	
TATGTCTTCA	CGCCTTATAC	TATGGTAAA	GATCACCGAA	CTAGCTTGA	GGTTGCTCAG	6840	
GTAGATAAGG	TTATGGATGG	GGACCTAGAT	GGTTTATCG	ATGCTTATCT	CAAGTGGCGA	6900	
ATTAGCTAAG	ATAGAAAGGA	ACTCACATGT	CAATTATTGA	AATGAGAGAT	GTCGTTAAA	6960	
AATACGACAA	CGGAACA	ACT GCTCTACGCG	GTGTTCGGT	TAGCGTTCAA	CCGGGGAAAT	7020	
TTGCTTACAT	CGTAGGACCT	TCAGGAGCAG	GGAAGTCAAC	TTTTATTCTG	TCTCTGTATC	7080	
GTGAAGTAAA	AATCGATAAA	GGAAGCCTAT	CAGTTGCTGG	TTTTAATCTG	GTAAAGATCA	7140	
AAAAGAAAGA	TGTCCCCTT	CTACGTCGA	GTGTTGGGT	TGTCTCCAG	GATTATAAA	7200	
TGTTACCAAA	GAAAACGT	TATGAAAATA	TTGCTTACGC	TATGGAAGTA	ATCGGGAAA	7260	
ATCGCCGTAA	TATCAAAAGA	CGAGTGATGG	AAGTTTGG	CTTGGTTGGA	TTGAAGCATA	7320	
AGGTTCGTTC	TTTCCC	AAAT GACTCTCAG	GTGGGGAGCA	ACAGCGGATT	GCGATTGCGC	7380	
GTGCAATTGT	AAATAATCCC	AAAGTATTGA	TAGCTGATGA	GCCAACAGGA	AATCTGGATC	7440	
CGGATAATT	TC	ATGGAAATT	ATGAATCTCT	TGGAACGGAT	TAACyTACAA	GGAAACAAC	7500
TTTTGATGGC	GA	CTCAT	AAAT AGCCAGATTG	TAAATACCTT	GCGCCACCGT	GTCATTGCCA	7560
TTGAAAATGG	CCG	TGTCGTT	CGTGACGAAT	CAAAAGGAGA	GTATGGATAC	GATGATTAGT	7620
AGATTTTTTC	GCC	ATTATT	TGAAGCCTTA	AAAAGTTGA	AACGAAATGG	TTGGATGACA	7680
GTAGCTGCTG	TCAG	TTCAGT	CATGATTACT	TTGACCTTGG	TGGCAATATT	TGCATCTGTT	7740
ATTTTCAATA	CAG	CGAAACT	AGCTACAGAT	ATTGAAAATA	ATGTCCTG	AGTAGTTAT	7800
ATCCGAAAGG	ATG	TGGAAGA	TAATAGTCAG	ACAATTGAA	AAGAAGGTCA	AACTGTTACA	7860
AATAATGACT	ACC	ACAAGGT	ATATGATTCT	TTGAAGAAC	TGTCTACGGT	AAAAGTGTT	7920
ACCTTTCAA	GTAAAGAAGA	ACAATATGAA	AAATTAAACCG	AGATAATGG	AGATAACTGG	7980	
AAAATCTTTG	AAGGAGATGC	CAATCCTCTC	TATGATGCCT	ATATTGTAGA	GGCAAACACT	8040	
CCAAATGATG	TAAA	AAACTAT	AGCCGAAGAT	GCTAAAAAAA	TTGAAGGTGT	CTCTGAGGTT	8100
CAAGATGGCG	GTG	CCAATAC	AGAAAGACTC	TTCAAGTTAG	CTTCATTAT	CCGTGTTGG	8160
GGACTAGGGA	TTG	CTGCTTT	TTAATT	ATCGCAGTT	TCTTGATTTC	AAATACCATT	8220
CGTATTACCA	TTAT	TTCCCG	CAGTCGCGAA	ATTCAAATCA	TGCGCTTGGT	CGGAGCTAAA	8280
AACAGTTATA	TCC	GTGGACC	GTTCTGTTA	GAAGGAGCCT	TTATCGTTT	ATTGGGAGCT	8340

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ATCGCACCAT	CTGTTTGTT	CTTTATTGTT	TATCAAATTG	TTTACCAATC	TGTCAACAAA	8400
TCGTTGGTAG	GGCAAAATCT	ATCCATGATT	AGTCCAGATT	TATTTAGTCC	GTTGATGATT	8460
GCCCTACTAT	TTGTGATTGG	GGTTTCATT	GGTCATTGG	GATCAGGAAT	ATCCATGCGC	8520
CGATTCTTGA	AGATTTAGGT	AAAATAGCTG	CTTTTATGAG	GAGATTGTAA	AATCTCCTTT	8580
TTTGCTACAA	GAGTTTTGA	AAAGAGATGC	GCAGAAGAAA	AGAGCTTCCA	AAGAAGTCCC	8640
CCAGAGAAGA	CTTC					8654

(2) INFORMATION FOR SEQ ID NO: 99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 19718 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 99:

TGTCGCGTCA	AAATCATTAC	TATGGCTATG	TATAGCCCTT	ACTATGACTT	GGCTAAACAC	60
GTTCGCTTTC	AAATTCTAG	GCTCAGGCTG	AAACAGTCTC	CCAGGCTGTT	CACTCCGAA	120
TGCTAAAATC	GTTCTTGATC	GCTTTCACAT	TGTACAACAT	CTTAGCCGTG	CTATGAGTCG	180
TGTGCATGTC	CAAATCATGA	ATCAGTTCA	TCGAAATCC	CATGAATAACA	AGGCTATCAA	240
GCGCTACTGG	AAACTCATTC	AACAGGATAG	CCGTAAACTG	AGTGATAAGC	GATTTATCG	300
CCCTACTTTT	CGCATGCACT	TAACAAATAA	AGAAATTCTT	GACAAGATTT	TAAGCTATTC	360
AGAAGACTTG	AAACACCACT	ATCAGATCTA	TCAACTCTTA	CTTTTTCACT	TTCAGAACAA	420
AGACCCCTGAG	AAATTTTCG	GACTCATTGA	GGACAATCTG	AAGCAGGTTTC	ATCCTCTTT	480
TCAGACTGTC	TTTAAAACCT	TTCTCAAAGA	TAAAGAAAAG	ATTATCAACG	CCCTTCAACT	540
ACACTATTCT	AATGCCAAC	TGGAAGCGAC	CAATAATCTC	ATCAAACCTTA	TCAAGCGCAA	600
TGCCTTGGT	TTTCGAAACT	TTGAAAACCT	CAAAAAACGG	ATTTTTATCG	CTTTGAACAT	660
CAAAAAAGAA	AGGACGAAAT	TTGTCCCTTC	TCGAGCTTAG	CTGACTTCAA	CCCACATACAG	720
TTGACAAAGA	GCCTAATTTC	CATAAAATT	GACATGGAAA	TTATAAAACC	ATTACTAGTT	780
TAGTCCTTTT	TGATAACGTG	CCAATTCCGC	TTGGTTGCC	CAAACATAGT	GACCTGGACG	840
GATTTCCTACC	ATAGATGGCT	TATCAGTCTC	ATAGTCGTGT	TGACTTGGAT	CGTAAACCTT	900
CAAGACCTTC	TTACGTTCCA	AGATTGGATC	TGGGATTGGT	ACCGCTGAAA	GCAAGGCTTG	960
AGTATATGGG	TGAATTGGAT	TGTTAACAA	TTCTCTGTT	TCTGCAACCT	CTACAATAAC	1020

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ACCCCTTGAA	ATAACTGCGA	TACGATCTGA	AATAAAGCGA	ACAACCGACA	AGTCATGGGC	1080
GATGAAGAGA	TAGGTCAGGC	CGAGCTCTTT	TTGGAATT	TTGAGCAAGT	TCAAGACTTG	1140
GGCACGTACA	GAAACGTCCA	AGGCTGAAAT	TGGCTCATCT	GCAATAACAA	AGTCTGGTTG	1200
CATGACCAAG	GCACGGCAA	TACCGATACG	TTGACGTTGA	CCGCCTGAGA	ATTCACTGAGG	1260
GTAACGAGTC	AAGTGCCTAG	CAAGAAGACC	TACTTCACGG	ATAATATTT	GAACCTTCTC	1320
TTTACGTTCT	TCTTCATCCT	AAATAAACG	GTGATTGTAA	AGACCTTCAG	AAATAATATA	1380
ATCAACAGTC	GCACGTTCAT	TCAAACTTGC	GGCAGGGTCT	TGGAAAATCA	TCTGGATTG	1440
ACGAATCAAT	TCCGCAGCTT	GTTCACGCGA	TTTCTTACCA	TTAATCTTT	GACCATCAAA	1500
AATGATATCT	CCATTACTTG	TATCATTAG	ACCGATGATA	GCACGACCAA	TAGTTGTTTT	1560
CCCACTACCG	GACTCACCTA	CAAGCGAGAA	AGTTTCTCCC	TTGTTGATAA	AGAAGTTAGC	1620
ATTTTTAAC	GCGACAAACT	TCTTACTTCC	TTCACCGAAG	GAAATTCTA	AATCTTGAT	1680
TTCTACTAAT	TTTTCAGACA	TTTCCTTCCT	CCTAGTCAGC	CAGATGGCA	AATCCCATTT	1740
TTTCACGGAT	CTTATCATGG	AGATTTGCAA	TCACAGCTGG	TTTTTCTACT	TTCGGAGCAT	1800
CCTCATGAAG	AAGCCAAGTT	TTAGCCCAAT	GTGTCTCTGA	TACTGAGAAT	TGAGGAGCTT	1860
TTTGTTCGAA	GTCATCTGC	ATPGCGTAGT	CAGAACGCAA	GGCAAAAGCA	TCCCCTTCA	1920
GGTCAGTATA	AAGTGACGGA	GGTGTTCCTG	GGATTGAGTA	AAGATCCCT	TTATCATCAG	1980
CAAGCTGAGG	CAAGCTAGAC	AAGAGACTCC	ATGTATATGG	ATGGCGAGGG	TCATAGAAGA	2040
CTTCCTCAAC	CGTTCCATAC	TCAACGATTT	CTCCTGCATA	CATAACCGCT	ACCTTATCCG	2100
CAATACTTGC	CACCACACCA	AGGTGCTGGG	TAATAAAGAT	TGTTGTAAA	TGATACTCGT	2160
TTTGTAAAGA	TTTTAGCAA	TCAATAATCT	GAGCTTGAAT	AGTTACATCC	AAGGCAGTTG	2220
TTGGCTCATC	ACAGATCAAG	ACATCAGGTC	GGCAGGCAAG	GGCAATAGCA	ATAACGATAC	2280
GTTGACGCAT	TCCTCCAGAA	TATTGGAATG	GGTATTCTATT	AAAACGCTTA	TCTGCGTCTG	2340
GAATGCCAAC	CTTATTCTATG	TAGTCAATGG	CCAATTCTTT	CGCTTCTTTA	GCTGTTTTTC	2400
CTTGGTGT	TACAATAACT	TCTGTAATCT	GACTACCAAT	TGTTTTAATG	GGGTCCAAC	2460
TAGTCATTGG	GTCCTGGAAG	ATAGTCGCAA	TCTTAGCACC	ACGAATTGT	TCCCAATCCT	2520
TGTGAGAAGA	TAAAGCTGTC	AAGTCCTGAC	CACGGTAGTC	AATACTACCT	TGGCAATAC	2580
GACCATTTC	TTCGAGCATA	CCTGTGAAGG	TCTTGTCAA	AACAGATT	CTGATCCTG	2640
ACTCACCTAC	CAAGGCTAAT	ACTTCTCCTT	CGACTAGTTC	AAGGGAAACG	CCGCGAATGG	2700
CTGTCAATAC	TTTGTACGAA	ACGTCAAATT	CCACGACAAT	ATCGCGAGCA	GTCAAAATT	2760
CATTTTTTC	TTTTGTCTATT	TCTACTCCTA	TCTATGTGTA	CGTGGATCAC	TAGCATCCGC	2820

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TAAGTTTGAA	CCAACTACGA	AAAGGGACAA	GGATACCAAG	ACAAGGGTTG	TCAATGGAAT	2880
CCAGAACAAAG	TAAGCATTGG	TTGTTACGTT	TTGTGAATAA	TCCGAAATCA	AACGACCCAA	2940
ACTTGGCACT	GTAATCGGTAA	ATCCAAGACC	GAAGAAAAGAC	AAGAAGGCTT	CGTATGAGAT	3000
AAAGCTTGGGA	AGCATTGAG	TCATGGTTGT	CACAATAACA	GATACCAATT	GAGGCATGAT	3060
ATTTTTGGCA	ACAATCTCA	AGGTTGGTGT	TCCCAAAGTA	CGTGACGCCA	AGTTGTATTG	3120
CAAGTCACGA	TAGCGCAAGA	TTTGCACACG	GATCATGAAG	GCAATACCAA	TCCATGTTGT	3180
TACGCTCATG	GCACAAATCA	GATTCCAGAA	TCCAGCTCCG	ATTGAGTAAG	TCAAGACAAT	3240
AAACATCAAA	AGAGGTGGGA	TGTTTGAGAT	GACGTTGTAA	ACTTCCATCA	TGACACGGTC	3300
AACTGATTGTT	GAAATACCCC	AAATACCACC	GACAAAAACCA	CCGATAACCA	AGTTAACAC	3360
TGTCGCAATC	ACAGAAATGA	GGATGGAGTT	ACGAGCTCCG	AACCAGACAC	CGTCAAAGAG	3420
CGATTTACCG	TTACTGTCAG	TACCGAACCA	ATGCTCCGCA	TTTGGCTTGA	TATAACGAAC	3480
ACTAAAGTCG	TTTACCTTGC	TGACATCATT	GAAATCAAAC	TTAGAAAACA	TTGGGTAGAT	3540
GAAACTTATC	AAAATGATGG	CTACCAAGAT	TCCCAACATG	ACTACAGTTG	ATTTTTCTT	3600
CATAAATTGT	TTAAACACTG	ATTTCAGTA	AGAATATGCT	GGCGCATCAA	TAGTTTCAGA	3660
GGCAAAATCG	TCACGTTTTA	CAAACGTGAA	TTTTCTTTA	TCGATTGTAG	ACATTATTTG	3720
CCTCCTTCT	CAGTCATT	AATACGTGGG	TCAATAATAG	TCATCCAAAT	ATCTCCAAA	3780
AGACGTGAGA	AGATAGAAAT	ACATGTAAAG	ATGAAGACAA	GACCAACGAC	CATAGAGTTA	3840
TTAGATGCTT	TTACAGAGTC	AATCAACATT	TTACCCATAC	CTGGGAAGGC	GAAGACTGTT	3900
TCAGTAAGGG	TTGCACCAACC	GATAACCCCA	ATAATGGCAG	CAGGAATTCC	TGAAACCAGC	3960
GGAACCATGG	CATTTTTAAA	GATGTGTTTG	TTTGAAATT	CTTTTCAGA	CAAACCTTT	4020
GCACGAGCGA	AACGAACAAA	GTCTTGAGAT	TGCAAGTCAA	TCATGTAACG	ACGAATCAA	4080
ATGGCTGTAC	CAGGAGCACC	CAACAAACCA	AGGATGACTG	CTGGTAAAAC	GTAAGAACGC	4140
CAATCTCCAG	CTCCCAAGAT	AGGGAATGAA	TCTGGAAGGG	CAATAGATGA	TCCAATCAAT	4200
CGAACGATGT	AAACCAAGGC	AATCGTTGGA	AGAGCAAGCA	AGAAGGTCAA	AGCCCCTGTT	4260
GAGAGGCTAT	CAATCCAAGT	GTTCTTGAAA	CGAGCCATGG	CTGAACCAAG	TGGCACGGCA	4320
AGAGCATAGG	CAAGAACCAA	ACCAATCAA	CCAGTAATAG	CAGAGCTGAC	AATCATAGAT	4380
GGATATTGGT	AATTACTTTC	AGTCGCTGTA	TAAGGATCAT	CTTTCCCATA	GCTAGCTACT	4440
TCACGAGAGT	CAGCCTGACT	AGGTGACTTG	TAGGTTCTTG	AGTAAATATT	TACAGAACAC	4500
GTTTCTTAC	CTGTTGGAA	CTGAACCTGG	GCAGTTTG	TTTGTCCCTG	ACCTTGAGTA	4560

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ATAACCTGAA	GAACCTGGTGT	ATTAGCATAG	GTTGGGTAAG	AGTCACCTAA	ATTCAAGTTC	4620
ACAAAGTTT	GATGAACAAA	TGGGAACGTGA	CTGTTAAAGT	ACAAGAGATA	TTTATGTTA	4680
GTTCCCTGAAC	CGACCAATGA	CCATCCGATA	GCTGGATCAT	TTTCAAAACG	AAGGTAGCGT	4740
TTCAAGTCTG	GATTTTCAGG	GTCTTGGATT	TTATTTGTAT	GGTCAATGTC	AATCAAGTTA	4800
GCATAGAACT	AAAAAACACG	TTCAAAAATT	GGAATTCAC	GAGTAGCATA	GAATTGACCA	4860
CTTTCAGTAA	ATTCTCCAA	AGTCCAACCA	TGACCTAATT	GATTGATGTA	CTTTTCATAAA	4920
ATAGCTTAT	TGGTCGCATT	TGCTTCTACT	GTTACAGAAG	AATCCATGCT	ACTTGCCTTT	4980
TCTTGCAACT	CTTTAGTATC	GTAATACTCA	ATGTAGCCCA	TACGCTCAA	CACAGTATTT	5040
TCATAGTTAT	CACGTTTATC	AGCCGTTGTC	GCAATTTCAT	TATAGTTAGG	ATCCTGCTTG	5100
AAAATCAATT	TTCGAGGAAC	CAAGGTATAG	ATAATCGTGT	AGGTCAAAGT	CGTTACTAAG	5160
AAAATCGAAA	CCAATGACCG	CAAAACACGC	ATAAAAATAT	ATTTTTCAT	ATTATTCCT	5220
TTAAAAATCC	CAAAGAACCC	TTCTCCTCAT	GGAGAGAAAG	TTCTATTAGA	AATTATTTAC	5280
TTCACATGAC	TTGCCAATTC	TTTTTGAGCT	TTCTCATTG	ATTCAGCTTT	TTCTTTCAAC	5340
CATTTTCAC	GAGCTTTTC	ATACTCTTCC	TTAGTCACCA	CTTTATCTTG	TGATTTCAAA	5400
TATTTGAAGT	AAACATCTGA	CCCCTTAGAG	CCTGTTGCG	CAGAAGCTCC	AGTAAATGGA	5460
ACAATTCTG	AAAGCACTGG	TGCTGCACCA	GAAGAAGCCA	TAGCAGGAAT	AAAGAGTGAA	5520
CTATCTGTCA	ACCATGCTTG	AGCCGCTGCA	TATTTTCAT	AACGGACATT	CAAGTCGCTT	5580
GTCTCTCTGG	CAGCTTCATC	AACTAATTAA	TCGTATTCTT	TCAAACCAAC	TTGAACTACT	5640
GAAGGGCTAT	TTGGATTATC	AAATCCTAAA	TATGTTTTG	TAGTTTCACT	GCTAGTTGTT	5700
TTTAAAATAT	CCAGGTAAGT	AGATGGGTCT	TGATAGTCTG	GCCCCCATGA	AACTCCTCCT	5760
GATACATCCC	AATCCTCAGA	TGAAGCATTG	GCAGCATAGT	AAGTAATATT	AAGGAATTCA	5820
TCACCTGTCA	TTTGTGAAAT	ATCAACAAACG	ACATTTCAA	CACCAAGAAC	TGTTTCTACA	5880
GATTGTTAA	AGGACTGAAT	ACGAGATATG	TAGTTTTTG	ATGCTTGGTC	TACTGGAACG	5940
TCCAGATGAA	TAGGAAACTG	AACGCCGTCT	GCTTCTAAAG	CTTTCTTAGC	TTTCGCAAAC	6000
TCTGCCTTGG	CCTTGTCA	ATTGAATAAA	CCATCCTGCC	CATCAGCTAA	ATTCACACCT	6060
TTCCACTCAT	CACCATAAGC	AGGAAGTTGA	GCAGCGACTA	AATCACCAAA	GGTCTCTCA	6120
CCAGCTGAAA	CAAAGCTGG	TTTACAAAT	AAATTACGAA	CTGCTAAAGC	TGCTCCATCT	6180
TTACCATTGA	TTTGAGCTGA	GTAAGCTGAG	CGATCAAGAG	CAAATTCAA	GGCTTGACGG	6240
AAATCTTGT	TAAGCAATGC	CTTCTTAGTA	GCTACTTTCT	CTGAATCTGT	AGTTTAGAA	6300
GTATAGTTGT	AACTTTGGCG	ATCAATATTC	ACACCCAGAC	CAGCAATCCC	AGAGCCTGAT	6360

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TGTGTGTAAT	AGATATTGTC	CTTGTATTCT	TCTGCAACCT	TAGAATAGTT	GGAGCTGGTA	6420
GGGTAAAGAC	GGGCATAACT	ATAAGCTCCA	CTAGTGAAGT	TACGCTCTAG	CGACTCCTGA	6480
TCTGATCCAT	CATAGTAAGC	TAGATTGATA	GTATCTAGGT	GGACATTTTC	TTTATCCCAA	6540
TATTGCTCAT	TTTTTACAAA	CTCTACAGAA	GATTTGCAG	TCAACCCTTT	CAACAAGAAT	6600
GGACCATTAT	AAAGCAAGGA	TGTCGGATCT	GTTGGTTAG	CAAATCGCT	TCCTTTGAT	6660
GTTTCGAATT	CTTCATTCAG	AGGCCAGAAA	ATAGAATAGG	TCAACTTAA	GTTCCAGAAC	6720
GGTTCAGGCT	GGTCAAAAGT	GTATTGTAAC	GTATAATCAT	CAACCGCCTT	GACACCAACT	6780
GTTGAAAAT	CTGTTGAAGT	TCCTGATAGA	TAATCTGCCA	AGCCTTAAAC	CGAATTTC	6840
GCTAAATACA	TAGCTCTGA	TTTTTTATCT	GCTGCGTGT	TTAAACCGTT	CACGAAATCT	6900
TTAGCCGTCA	CCTCTGCATA	TTCTCTCCA	TCAGAGGTAA	ACCATTAAAC	CCCTTACGA	6960
ATCTTATAAG	TGTAGGTCAA	ACCATCCTTA	GAGACTTCCC	AATCCTCTGC	AACTGCAGGA	7020
GCAAGATTAC	CGTAATTATC	GTTAGTGAAT	AAACCATCAA	TCCCATTGAA	AGTCACTACT	7080
GTTGTACTAT	TTTTACTTGA	AATCAGGTAG	TCCAAGGTTT	CTGGGTCTGC	TGTATAAACAA	7140
TAGCCATAAG	CTTTAGGGC	TGATGAATCA	GATGATTTG	AAGAACTGCA	TGCTGCAAGT	7200
ACACCTGCTG	CTAATAAAAC	AAGACCTGCT	GTAGCAAATA	CACGATTTTT	TTTCATTTC	7260
TACTCCTCTG	TTTATGTGAA	TTATAGATTG	ACAACCATT	TATCACATT	TCCATTAAAA	7320
ATCAAACAAA	TTTCAGAAT	ATTTAGGCTT	GTTGGCACAA	ATTTTTCTATT	TTTTTGAAAT	7380
ATATGATTCA	AATTGTCGTT	CGAAGTGTCA	AAGACTACAG	TGAAAATAGG	AAATTGACG	7440
CAGAAACTT	GGAGTTAGG	AAGACATACA	GTAAAATGAA	ATACGGACGG	AACAATGTGA	7500
TTTTGGAATT	CAAATTAAT	TATAACAATA	TTGTAGAAGT	ATCATTCTAG	TATTCAAGAT	7560
TCAGTTTACT	ATGTCTTTTC	ACACCAACCT	TATCCGAAT	TCAATTACTT	TTGTGATT	7620
CATATATAGA	TTAAGACTAT	CTTTTAACT	TTAAAATTT	TCGCTACCTT	ATCCACTATA	7680
TGCTCCTCGC	TATCACGTTT	CTATTCACTAG	CCTACGATTT	CACTATTGCT	TTCTCTGACA	7740
ATTCTTATT	CCTGCGTCAG	ACTTAAACG	ATCTATCCCC	AGACCATT	AAATCCGCTAC	7800
CTCACGATAG	TCAGGCTTGG	GGAGCGCTAT	TGTATTCA	GGTAGTGGAG	CCCTACAGAG	7860
GACTTACACC	TCAGATGCAC	GACATGCCA	TCGTATAAAA	AATCTCCTAC	CCAAGGTAGA	7920
AGATTTCAAA	CTTATAAAAC	TTAATCCGTC	ATGTCCGATA	CCAACATTG	ATGCTCCAAT	7980
GGAATACTGC	ACATAACTAG	CAAGAAAATA	AAGCCTGACT	GAATCCAGAA	GAGAGCCAAG	8040
TCAAAATTC	CGTGCACAGC	AACCACTGTA	AGGAAAGATA	GATAAAGGCC	GATAATCGGA	8100

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CGTTTCCCCG ACTCCTGACT CATATCCATC ATCAAGCGAA CAGGAGCAAC AGAAGACAAA	8160
ACTAATAAAA TAGTCCCCAC AATTCCGTAA CTCAGAATCG TATCAATATA AAGACTGTGG	8220
GCATGTTCAT GATAAGGAGC ATGTATCCGA GGATAAGAGT TCATATAGGT CAATGCCCT	8280
TCACCCCCAA AAGGATTTCG CTTAACAAAG GCCATCCCAG CATCCCAGAT AGAAATGCGT	8340
TCTTCCATAG AAGAGTCTAA AGTACCCATT CGAACTCCCA AATCACTAGA AAAGAGGAAA	8400
CTCAAACCAA TCGCGAAGAC CCCAATACTA AGCCAAAAGG CCTTCCAGTT TTTAATAGTC	8460
GTAAAGAGAT AGATAATTGC TCCAGCGATA ATAGCAGGAA AGGCAGTCG ATTTTGAGTA	8520
AAGTTCAAAAC CAAAGAGATT AACAAAGCCT GCAATCACAC AGAATACTTT CAACCAATT	8580
AACTTGGTCG TTGTAACAG ATAGAAAGCA ATCATAATAC AGAAACACA AATAATTCCA	8640
TAATAATTAG GATTAAAGAA GGTCACTTCT GCCCGGTTCT GATGCCACAC CTGCATATTG	8700
GGTGAAAGAA AAGCATAGTT AAATTTCTTC ACAATTGGA AATGTTCTAA ACTGGCAAA	8760
GCAGCTGACA AGACACTACC AAACAAGACA AACTGCAAA TCAATCGAAA GAATTATGG	8820
GATAAAATCG ACTGATAGT CAAAAAGAAA ATAGTAAATA GAAACATTCC TACTGAAGCC	8880
ACAAGACCCA TCCAATTTCG TGCAAGAATG GATATAACAG TACTATAGCT AAGAAAAGA	8940
AGCAGCATCG GATGCTCCC CATTTCCTGA AGAATACTTT TCATGTCTCC TGAAAAATC	9000
AAACTGATAA TATATAAACAA GAGTACAAC TACAAAAAGAT AAAAGGGTAA AAAGATACTC	9060
AGGATAATTTC CCAATAAAAT CAGCTCTTA CTAGACAAACC CCTTCAGCTT TTCAATAAG	9120
CCTATTGATT TCAAAATGAA TCCTTCTCT CCAAATCAGC TGATTCAGAT AATAGTAAGC	9180
TATCCTATAT TGTACCACTT TTTAGCAAT TTGAAAACAA AGGAAACGTT TTCCAAAATA	9240
AAAACCTAT TTTATCCACC ATATCAAGGC TTCAAAATGA TACTTCAACT CCATTCTCAA	9300
TTACCCGATA AGTCTGATTT TGCAAATCAA TTTCTACTAC TGCTGTTACG GACTTATCTT	9360
TATTTTGACG TTTGATTACA ATGCTGTGAG CTGTTGGTGT CTCTATCTCA GTAGTCCCTT	9420
CTAGATCAAA GGCTTCTGAA CGGTTACGGA AAGAAAATAG ATTGAGAAGG GCCTTCACAA	9480
CAGGTCGTTG CACTTCTTT GCTATTTCT CGTTGCTATA GTAATGACGA TTAATATTC	9540
GACCTTCTTT AGTTTCTCT AATAATTCA AGTCATTCTT GCCTGCTAAT AGACCCACAT	9600
AGTAAATCTG AGGAATAACCT GGGGCAAAAG CTTGAATTAG ACGAGCGAGA AAATACTTGA	9660
CATCATCATC TCCAAGCGCT GAATAGTAGG TTGAATTGAT TTGGTAGATA TCTAAGTTGT	9720
TATACTCGGC ACTAGAGTAC TTACGTTGA CATTGGCTCC AACCTTATAG AGTCATTTG	9780
AAGCATAGTC AATCTCCTCA TCGGTCAAGGA TATCCTTGAC ATCTACTACT CCAATCCCAT	9840
CATGGGTATC TAGCGTCGTA AATTGCTTCA TCGGGCTCAT CTTTAACCAC TTAGCCAAAC	9900

GCTCTGTTCT	GGAACGTAA	AGAGTATAAA	GTGTCACCAT	TGGAAGAGCA	AAATCATAAA	9960
CATAGTAATC	ATGGTCTGCT	ATTTTAAACT	GAATCGAATA	GTGTTCATGA	ATCTCAGGTA	10020
AAAGCTCTGT	CCCATACTCA	GCAGCGATAT	CTCGAACCTT	GTCCAATAAA	TCCCAAATAT	10080
CTGGTTCAC	AAAGAAATCA	TTAGTATCCA	ATTTCTTCAC	TGCATAAGCA	AAGGCATCTA	10140
GACGAATCAA	ATCACACCCA	TTACTTGCCA	AGTGCTGAAT	GGTCTTACGG	ATAAATTCCA	10200
TAGTTACTTC	TTTGGTCACA	TCAAGATCAA	TCTGCTCCTC	ACCAAAGGTA	TTCCACAAAT	10260
GTTCCACTGA	ACCATCTTCA	AACACAATCT	CTTGCTTTGG	TGCACGATCC	TTACGCTTGT	10320
AAATTAATC	TACATCAGAC	TGTGTCGGAC	GGTTTCTGG	CCAAAACCTA	TCCCAGTTA	10380
AAAAGAGAGC	TTTAAATTCA	CTGGCTTCAT	GTTCCTTG	ATAGTCCTTA	TAATACTTGG	10440
ATTGACGAGA	AATATGATTA	ATCATAAAAT	CAAACATAAG	ATAATATTTC	TCACCTAAC	10500
GCTTCACATC	CTCCCAATCA	CCAAAAGCTG	AGTCCACTTC	GTCGTAGTCA	ACTGGCGCAA	10560
ATCCACGATC	AACTGTTGAT	GGGAAAAATG	GTAAAAGGTG	AACTCCTCCA	ATAGCATCTC	10620
CAAAATGCTC	TTCCAAATTA	TCATATAAGT	CTTAAAGATT	ATTTCAAGG	CTATCAGAAT	10680
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CCAAGTCTCA	TATGATCTGG	CTTCATAAAT	AAAATTCTT	TTAAATCTCT	ATTTATCATC	10800
AAACTCGTAC	TAATATAGAC	TGTGATAAAC	AAAGTACTAC	TTTCTTGT	TCTGCATAGA	10860
ATTATCAACA	AGCTAAACTC	TTCCCTCTGTG	TCAAAGACTA	TAGATTCCAT	GAGCTCTTCT	10920
TATACTCTTC	GAAAATCTCT	TCAAACCACG	TCAGCTTCAC	CTTGCCGTAG	GTATGGTTAC	10980
TGACTTCGTC	AGTTTCATCC	ACAACCTCAA	AACAGTGT	TGAGCAACCT	GCGGCTAGCT	11040
TCCTAGTTG	CTCTTTGATT	TTCATTGAGT	ATTACTTCAC	TGCCCCGTG	CTCATTCCCTG	11100
AAATGATATG	GGCGTGGAAAG	AAGAGATAGA	CAATGGTGAT	ACTGATAATG	CCGACCACGT	11160
AAGAGGCAAA	GCTTGGTCCG	TAGTCGTTGA	AATATTGGCC	TGCGTAGTTG	TATTGGAACCA	11220
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TCCAGAACCA	AAGGGCATTG	ATGATCATGG	TTGTCGCATG	CATCGGTTTC	ATCATTGGGA	11340
AGATGATGCC	GAAATAGGTT	GTAAATTGAT	TAGCCCCATC	GATCTCTGCT	GCTTCATCCA	11400
GACTTTCTGG	AATCGAGATT	TTGATATAGC	CAACATAGAG	AAAGAGGGTC	TGTGGAATCG	11460
CATAGGTCAA	GTAGAGCAAG	ATCAAACCAA	AGGTATTAGC	CAAACCGAGT	TTACTCATCA	11520
TAACCGTAAT	CGGAATCATG	ATGACTTGGG	AAGGTACGAA	GATTCCGAGG	ATTAAGAGGG	11580
TATACATGAT	GGTAAAGGCT	TTTCTTTAC	TCATATTGCG	AGCGATGGAG	TAGGCTGCCA	11640

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TAGGGATAAA GATCATTACT GCAAGTAAAG ACAAGACAGT GATGACGACA GAGTTCCAAT	11700
AATAGCCTCC AATCCCATCA GCTAAGAGAC GGCTAAAGTT GTCCCATGTG AAGTTGGTTG	11760
GAAAGCCAAA GAAATTATCT ACAATATCCT TAGTGGGTTT GAAGGAACTA AAGAGGGTAG	11820
CAAGGAGCGG CACTAAAATC AGAACCGATC CTAGAATCAA TAGAATGTAT TTGCCAATCA	11880
GGGCTTTCTC TTCATCTTGT TTCATCATGC TTCTCCTCTT AAATTCAAA TTTCTTAGAT	11940
ACTCTCAATT GGATGATCGA AATCACTACA ATTAAGAAGA ACAAGATTAC GGCAATGGCA	12000
TTGGCATAAC CGAATTGGTT GTTTTAAAG GCATAGTTAT AAACCAAGAG CCCAAGTGAG	12060
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GTTGGAATAG ATTGCAAACC AGCTAGGAAG ATGATGATGG GCATAGCCAC CCCTTGCCAA	12300
AGAAGGACAA AGACAGCCGC AAAGATTGCT CCCCACCTAG TCCCTAAAAG ACTGGTTGG	12360
AAAAATTCAA TATGAAGGGC ATTTCACATC GCTGGAAGAC CGTAGTTGAA GACTTGCTTG	12420
AGATCAAAG CCACTGTCAA ACCAGATAAA ACAGCTGGGA AGAAGAACCA AGCACCGAAG	12480
AAGGTTTGGC CTTTGATTT AGAATTCAAG ACACCGCAGA TGAAGATCCC GAGTGCAATC	12540
TCACCAACCA CCATGGCAAT CGCAATGATT GCGGTAAAGC CAATCGCATT CATGAATTTC	12600
GGATCCATGA AGAGGAGCTT AAAGTTGTTT AAGCCAACAA ATTTGTAGTT ATAAGTCAAT	12660
CCTGTCCAGT TGGTAAAAGT GTAAAAGGCT CCTTGAAACA TCGGCACATA GAAGAAAATT	12720
GCTTGTAACA AGAGGGGAT GACCACAAAA GCCCCATGCC AATATTTTG TAATACTTTT	12780
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GTCTGCTTCA CTGGTCCAGT ATTGTTGCAA CCAGACCAAG TGACGATCCG TAAAGGCATA	12960
TTCGGTCATA CCAGCAAGCG GTGAATCTTC TCCTGCTTGT TTGACCCCTT CGATCGCTGT	13020
TGGAGATCCG TCCACATCGT AGTATTTTG CATGACTTCT GGACGGGTCA TATATTCCAC	13080
AAAGGCATTG GCTTCTTTG GATGTTGGT GGTGGCTGAG ATAGACCATG CCAAGTCTCC	13140
CGCACCAACG GTTAAGCTTT GTCCTTTTC TTTTCCTGGA ATCATGAAGG TCCCAATCTT	13200
AAAGTTCGGT TTTTGTTCAT TAATCGCTGT GATCGCCCAA GACCCATTG GTGTCATGAG	13260
GACATCCCCA CGTGCAGG CTCCGATAAC ATCGGTATAG CCAGCACCTT CCCAGTTCTT	13320
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ATCCGACAAT TTAATGGCAT TTGGTTGAGA ATAACGAAGG TATTGATTG CTTCTTTCC	13440

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CACATCTCCT	GCGAGAACGC	GTGTCTTCAA	TACTTCACCA	GCATTTGGTA	CATTGACGAC	13860
TTTGACCTTG	ATCTTAGGGT	TTTCCTTCTC	AAAATCACGA	GTGATTCTT	CCAAGGTTTT	13920
GGTCATTTCT	TTTTCTGGT	TGAAATACTC	GATGGTCACT	GTGCCATCCG	CAGATTAC	13980
ATAGTTGGAG	CAAGGCCCGA	GCCCAACAA	AGCTAACCT	GTAGTTGCAA	GAAGTCCGAT	14040
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CACCCCCAAA	GTTAGACAGA	ATAAAATCTAA	CTTTTGGGGT	CAGTACATAT	CATAGTTTC	14160
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CGTAGGTTAC	AATCGTTGA	TTTCCGTAAT	TAAATTGTAC	AGCTGCTTC	TTGGATAACAG	14400
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GTCCCAC	ATGATTGGT	ACTGCTGACA	CATGAGCCCC	CATAGAAATG	GTTGGATAGA	14640
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TGATATTGCG	GTTCATATCC	CATTTAATGT	AATCAATATC	ATGATAAAAT	AGGAGTTGAT	14940
CTAAGACACT	TTTCAAGTAT	TCTACTACCT	GAGGATTGGC	AAGATTAAGT	ACTAATTGAT	15000
TCCGAGAATA	AGTATGCTA	TAGCCAGGAA	CCTGAATAGC	CCAGTCAGGA	TGTTGACGAT	15060
ACAAATCACT	ATCTACAGAA	ATCATTTCGG	GTTCTAACCA	AAGTCCAAAC	TGCAAACCTC	15120
TTTCATGGAT	AGCTGAAATC	AGACTTCTA	GACTTCCACC	CAGTTTTCC	TCATTAACAA	15180

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CCCAATCACC	TAAAGCACGA	TTATCATCAA	AACGATTGCC	AAACCAACCA	TCATCTAATA	15240
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GAAAGTCAAA	GTAAGTAGCT	TCCCAGTTAT	TGATTAGAAT	TGGACGTTCT	TTTTTAGAAA	15360
ATTCACTTAG	CATAATGTGC	TTCACTGACAA	AATTCTGACT	TTCACTGACTA	ATACCAGTTA	15420
ATCCCTGATC	TGAATGAGTC	ACTAAAGCTA	CCGGTGTTC	AAAGTATTCC	TCAGGAGCTA	15480
ACTTCCAAGA	AAAGTTTCT	GGATTAATGC	CAATAGCCAC	CCGAACTTCA	TTCAATTGAT	15540
TTTTTGAAC	AAAAGCTTCA	AAGTTGCCAC	TATACATTAG	TTGAATAGCA	AACACATTCC	15600
CAGCATCCTC	TGTGACTCCT	TGTCGCATA	GTAGAAGAGC	TGGTGTGTTGA	GCATGACCAG	15660
AAGCACCTCG	GTTGAACTA	ATCGAAAAGA	TTCCCTGTT	TACCTGTTGA	CGTCTAACAG	15720
TCTTTTCACG	AGCATAAGCA	CCCTGCAGAG	TTACTATTT	GTAATCTGCA	GCTGGAAAAT	15780
CAGCCATAAA	AGAAAATCT	TTATGGATGA	CAACTTCCTG	ATTACTATTA	TTATCTAATT	15840
TACTGTAGCT	AGCAATAGTC	GCATCATTAT	AAAAAGTAGT	ATAATACAAA	GTCAGACTAA	15900
GTTGAGCCTT	AGAATCTCT	AACATTAAGA	CAAGAGTC	TGTATCGTCC	ATGCTATGTG	15960
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AGTCTGTTAC	TTCAGTTACA	CTATGCTGAA	CCTGTATGGT	TGGTTCCCTA	AAATCTCCTA	16080
AGCCATGTTG	TCCAAAATC	TGTCGCTGAG	TATCTAAACT	AAAGGTTCGA	TTAGTAGCCG	16140
TTGGATTTC	TGAAAAGGCA	TGGTCTCGTT	CATAAACACT	ATTGGAACCT	TTATAGTTCT	16200
TAATAGTCTT	TCCTAAATGT	TTCAAAAGTA	AGTAGCCATT	TCGATTTCA	ATAATCAAAC	16260
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CCTCATCACT	TTATTGATTA	TATTTATCA	CCTGAAATCG	CTTTCAAAAA	TAGAAAATG	16380
TCTCAAGAAT	ATGGTAAAAT	GTTAGGTAGG	AGGTAGCACA	TGTTAGTTTT	TTCAGAATAC	16440
CAGACTGGAA	CAATCGACCT	TGCCCTAAGC	TTTTATGGAT	ATGAGGAATG	CACACCTAAT	16500
TACTCTTTG	GTCCAGCCAT	TCGTGATACA	TACGTTCTAC	ATTACATTAC	TAAGGACAA	16560
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TTAGGAATCA	CTGGAGGGAA	AGCCCTGAT	TATTTGCTC	TTTCCAAAT	TTCTGATCAA	16740
TCCTATCTCA	TCCAATCTGA	AACTTGTCA	ACCCAGACTA	CTGAAAAC	CATCTCAGAC	16800
ATTGTCCGCT	TCGCTCAGAT	TACAAATCA	AGTGAATTAG	CTCAACTCCA	TATCATGGGA	16860
CAACTTCATG	AACTGATGTT	TCATCTGGGA	ACTATTGCTC	CCAATCAGAA	AAAAAAGAAT	16920
ATTTCATCAA	CCCACCAACT	CTATCTTGAA	TGCAAACGAT	TAATTGATAG	CCACTATCCT	16980

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CAATCACTTA	CAATTCAAGA	TTTAGCAAAA	GAACTATCCG	TTCACAGAAG	CTACTTATCA	17040
AGCGTATTCA	AAGAATTAA	TACCTTATCA	CCCAAAGAAT	ACCTACTCTA	CGTTCGAATG	17100
CACCGAGCTA	GACAACCTCT	CGAAAATACC	CAAGAGTCCA	TCAAGGTAAT	TGCATACTCG	17160
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CCAAGTCATA	CAAGAAAAGA	ATACTCTCAA	TACCAACTAG	TAAGAAAGGC	AACATTATGA	17280
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ACCTTATTCT	TCCAGAGATT	CTAGAAGAAA	ATCTTCCAAT	TAAAGTCAGC	TTTAAACCCG	17520
AAACAAAATC	AACACAACTA	GATGCAAAAG	AAGCAATTGA	TTTAGGCCAT	GAAGCAAATA	17580
CCCTCTATCT	AGCTTCCTAT	CAAACAGCAG	GCCGAGGCCG	TTTCAACGT	TCCTTCTACT	17640
CACCACAAGG	TGGTATTCTAT	ATGACACTCC	ATCTTAAACC	AAATCTCCCC	TATGACAAAT	17700
TACCATCCTA	CACACTACTT	GTAGCTGGAG	CTGTCTACAA	AGCCATTAAG	AACCTAACTT	17760
TAATAGATGT	CGACATAAAA	TGGGTCATG	ATATCTATCT	AAACAATCAT	AAAATTGGAG	17820
GAATCCTTAC	TGAAGCAATG	ACCTCTGTAG	AAACTGGCTT	AGTCACAGAT	ATCATTATTG	17880
GAGTAGGTAT	CAATTCACT	ATTAAAGACT	TCCCTCAGGA	ATTAAAAGAA	AAAGCTGCCA	17940
GCTTATTTAA	AGCTACAGCT	CCTATAACAA	GGAATGAATT	GATCATAGAA	ATCTGGCGTG	18000
CTTTCTTCGA	AACACCAGCA	GAAGAGCTAT	TATACCTATA	CAAAAAACAG	TCATTCAATC	18060
TAGGAAAAGA	AGTCACTTTC	ACACTAGAGC	AAAAAGACTA	CAAGGGACTT	GCTAAAGACA	18120
TCTCAGAAAA	TGGAAAACCTT	TTAGTTCAAT	GTGATAACGG	AAAAGAAATC	TGGCTAAATA	18180
GTGGCGAAAT	TTCTCTCAAT	AGTTGGAAGT	AAAATAACAC	AATTATAATA	TAACAGATAT	18240
AAAAATAACT	TCAGATTAGT	AATTCAATTA	AGTTTACGG	ATCTGAAGTT	TTATTGGCTC	18300
TAAAAATAAA	AAAGAGAGTT	ACAGACTCTC	ATTAAAACGG	AGAATAAGGG	ATTCGAACCC	18360
TTGCGCCAGT	TACCCGACCT	AACGATTTAG	CAAACCGTCC	TCTTCAGCCT	CTTGAGTAAT	18420
TCTCCAATTA	ATGGGCACGA	GTGGACTCGA	ACCACCGACC	TCACGCTTAT	CAGGCGTGCG	18480
CTCTAACAC	CTGAGCTACG	CGCCAAGTT	AAAAAACTTG	GTAATTGAA	CAAAGTTCAA	18540
AGCGGGTGAC	GAGAATCGAA	CTCGCGACAA	CAGCTGGAA	GGCTGTAGTT	TTACCACTAA	18600
ACTACACCCG	CATAAAATACT	ATCAATAAAA	TGGCGCGAGA	CGGAATCGAA	CCGCCGACAC	18660
ATGGGAGCTTC	AATCCATTGC	TCTACCAACT	GAGCTACCGA	GCCTTATTGC	GGGAGCAGGA	18720

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TTTGAACCTA CGACCTTCGG GTTATGAGCC CGACGAGCTA CCGAGCTGCT CCATCCCGCG	18780
TTAATAATAT AAAAGGAGGA TGTGGGATTG GAACCCACGC ACGCTTTAC ACGCCTGACG	18840
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AAGGTCCGAC AAGATCATTAGCGGAA GGGGATCGAA CCCCCGACCT CCCGGGTATG	19020
AACCGGACGC TCTAGCCAGC TGAGCTACAC CGCCATGAAT CGGAAAGACA GGATTCGAAC	19080
CTGCGACACC TTGGTCCCAA ACCAAGTACT CTACCAAGCT GAGCTACTTC CCGAGTTAAA	19140
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ACTGAACTAC GTTCGCACTG TTTTCTTCTA TCTAAAAATG CCGGCTACAT GACTTGAACA	19440
CGCGACCCTC TGATTACAAA TCAGATGCTC TACCAACTGA GCTAACGGGG CTCATTGTT	19500
ATATCTTAAT GCGGGTTAAG GGACTTGAAC CCCCACGCCG TTAAGGCCA GATCCTAAAT	19560
CTGGTGCCTC TGCCAATTCC GCCAAACCCG CATATATGAC CCGTACTGGG CTCGAACCAG	19620
TGACCCATTG ATTAAAAGTC AATTGCTCTA CCAACTGAGC TAACGAGTCT AAAATAACTT	19680
CGCTTACCTT AAACGGTCCG ACGGAATCGA CCCGGTAC	19718

(2) INFORMATION FOR SEQ ID NO: 100:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 100:

CCGTGGAAAA GTCTGGATAG TGAATGGTCT TCACACAATG ACCTGAAAGA AGCCTGAGAA	60
TAATTATGGA GAGTAGCATT CTGAGAGGTG TTAGCAGAAC CATATGACAG AGCTGTTGA	120
AGAGGGAAATA TTGAGGAGAA AAATCCTGAG CCTACCAGTT GGAGTTGGAA AGAGCTGACT	180
GTTAGATCAT GGTTTATTAT CCACAACCTG TGGATAACTT TGTGAATAAG AGAAGTTGCT	240
AAAGAAGGAG ATATATAACG ATGAAGAAAA TCAAACCGCA TGGACCGTTA CCAAGTCAGA	300
CTCAGCTAGC TTATCTGGGA GATGAACTAG CAGCTTTAT CCACCTCGGT CCTAATACCT	360
TTTATGACCA AGAATGGGGG ACTGGACAGG AGGATCCTGA GCGCTTTAAC CCGAGTCAGT	420

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TGGATGCGCG	TGAGTGGTT	CGTGTGCTCA	AGGAAACGGG	CTTCAAAAAG	TTGATTTGG	480
TGGTCAAGCA	CCACGATGGC	TTTGTCTTT	ATCCGACAGC	TCACACAGAT	TATTGGTTA	540
AGGTCACTCC	TTGGAGGAGA	GGAAAGGGCG	ACTTGCTCCT	TGAAGTATCC	CAAGCTGCCA	600
CAGAGTTGA	TATGGATATG	GGGGTCTACC	TGTCACCGTG	GGATGCCAT	AGTCCCTCT	660
ATCATGTGGA	CCGAGAACG	GACTACAATG	CCTATTATCT	GGCTCAGTTG	AAGGAAATCT	720
TATCAAATCC	TAACATATGG	AATGCTGGTA	AGTCGCTGA	GGTTGGATG	GATGGTGCCA	780
GAGGAGAGGG	CGCGAAAAAG	GTAAATTATG	AATTTGAAAA	ATGGTTGAA	ACCATTCGTG	840
ACCTGCAGGG	CGATTGCTG	ATTTTTCAA	CAGAAGGCAC	CAGTATCCG	TGGATTGGCA	900
ATGAACGAGG	GTATGCAGGT	GATCCACTGT	GGCAAAAGGT	GAATCCTGAT	AAACTAGGAA	960
CAGAAGCAGA	GCTGAACTAT	CTTCAGCACG	GGGATCCCTC	GGGCACGATT	TTTTCAATCG	1020
GAGAGGCAGA	TGTTTCCATC	CGTCCAGGCT	GGTTCTACCA	TGAGGATCAG	GATCCTAACT	1080
CTCTCGAGGA	GTTGGTCGAA	ATCTACTTTC	ACTCAGTAGG	GCGAGGAAC	CCACTCTTGC	1140
TTAATATTCC	GCCGAATCAA	GCTGGCTCT	TTGATGAAA	GGATATTGAA	CGACTTTATG	1200
AATTGCGAC	CTATCGAAC	GAGCTCTATA	AAGAAGATTT	GGCTCTGGG	GCTGAGGTAT	1260
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GCTCTGGGC	AAGCGATGCA	GACTGCCA	TCCAGTTAGA	ACTCGACTTA	GGTTCTCCTA	1380
AAACTTTGAG	TGTAATTGAG	TTAACAGAAC	ATTGAAGCT	AGGGCAACGA	ATCGCTGCTT	1440
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GTTACAAACG	TCTCTTACGA	GGAGCAGTTG	TTGAGGCACA	GAAGATACGT	GTAGTCATTA	1560
CAGAACATACA	GGCTTTGCCT	TTGTTGACCA	AGATTTCCCT	TTATAAAACT	CCTGGATTAT	1620
CAAAAGGAGA	AGTTGTTCA	GAACCTAGCAT	TTGCAGAAAA	AAGCCTAGCT	GTGGCAAAGG	1680
GAGAAAATGC	CTATTTACA	GTAAAGCGCA	GAGAACATGAG	TGGTCCTTTA	GAAGCTAAGA	1740
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TTGCGTTCA	AACTGGTGAG	ACTGAAAAAA	GTCTGACGCT	ACCAACCTTG	TATTCGCGAG	1860
GAGATAAAAC	CTTGGATTT	TATCTGAACC	TAACGGTGG	TGGTCAGCTT	GTGGATCAAC	1920
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TAGTGACTTG	GTAACCAGCT	GAGGGTGAAA	GTAGTTGTT	CAGCTTTAA	GAGGTCTTGG	2040
TGTTGAATAG	TTGATACGAG	TGTTTGTCC	AGTCGGCATT	CTTTGACAAA	GTTAAAATGG	2100
TTGTGGTTTT	GTTTAGTATG	GATATCCAGC	CATTTATCTT	CTTTAGCGAG	GTAGACTCGT	2160

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AGATGGTCAA AGAGAGGGAT TCCGAGGTCA TAGCTGGTT TTCCCTGGACA GGTTGGATAA	2220
AATCCGAGAG CTGACCAGAT GTACCAAGCA GAGAGACTAC CATTGTCTTC ATCTCCAGGA	2280
TAGGCTTCCC AACTTGGGTG AAAAGCTTTC TGACGGAGCG TCTTGATAAG AAGGGCAGTG	2340
TAGTCAGGGT AATCGCTGTA ACGGAAGAGA TAAGGAATGT GGAAACTAGG CTGGTTGGAA	2400
ATGGCTATTT GTCCAAAAGG AGCAGTAGCC ATCTCGCTCA TTTCGTGAAT TTCGTAACCA	2460
TAGCCTGTTG TTTCAGGAGA GGGAGCATCT TGACAGGCTT TCAAAAGATA GTTGCTAAAG	2520
GTTTCTTTTC CACCCATCAG TTGGATTAAG CCAGGGATGT CGTGGAGAAC GCCTAAAGTA	2580
GCTTGAATGG CAGAGCATTG AGCGTAGTCT CGCCCCAAC TATAAGGAGA GAAGTCAGGG	2640
TGAAAGTTTC CTTGATGTGTC TCGTGCTCGC ATGTAACCTG TCTCAGCGTC AAATAGCTGG	2700
CGGTAATTTT GTGAAGCAGC CTTGTAGGTT TCAGCGATTT CTATGTTCTC TAGTTTTTG	2760
GCACAGCTGG CGATACAAAA GTCACTATAG GCATAGTCTA GAGTATGGCT AACACTTCG	2820
TGGTGGTCGG TAGAGAGGTA ACCTAGTTCT TGGTATTGGG CTAGTCCGTG GCGGCCATTG	2880
ATGCCGAGAG GGTCGGCTT GCTGGCTTT TCGAGCATGG CTTGGAAGAG TTCTCCTTCT	2940
AGGTGGGGGG TCATGTCCTT GCAGGGCTA TCTGCGATAA TACCGTCTAA AAGTGTACCT	3000
GGCATCATAAC CCCGTTCATC TGGAGCCAGC CATTGGAA GGAAACCAGT ATCGCGGTAG	3060
CTATTGAGGA AACCTTCTAA AAAGCGTTGA TAGTGCTCCG GTATGATAAG GGCAAAGAGG	3120
GGGAAGGTGG TGCAGGAAAGGT ATCCAGAAA CCATTGTTGC TAAAGAGGAC ACCAGGCTTG	3180
ACAGTACCAAG TAGCCAGATC CATGTGGATG GCTTGCCCTG ATTCAATTAACT CTCATAAAAAA	3240
GTCTGTGGGA AGAGGAAGAG TCTGTAGAGG CAGTGGTCAA AGAAGGTGCG GTCAGCCTCT	3300
CCTGTCTCTA TAATGTCAAA ACGATGGAGG AGATTTCCC AATCCACTTG GGCACATTGAT	3360
TTACAGCTAT CAAAATCTTC TTGAGGTAGA TTGATTAGAG CTTGAGAAGG AGAGATGAAA	3420
GAAGTGGCTA GTTGCATCTC GGTTGACTA CTTGCTAAGT CAATTCGCCA GTCTCCAGCT	3480
TCTTGGCTGA TAGCAAGAAT ATCCGTGTTA CTTTGCAAGGG CAGTGAACAT CGTTAGCGAA	3540
TTTTGGTTAG TTTCAAGTTT ACCTTCTTGT CGCAGGGCAA GAGTCCGCTT ATCTACTTGC	3600
TCTACTGTCA GTTCATCTGC TGCGTGAAGA TAGAGGGAGA GGGCTTGCC TTGCTTTGA	3660
TTCAAACGAA TAGAAGCACC ATAGCAAGTC GGTGTGAGCT GGGTTCAAT CTGATAACGC	3720
AGAGAAAAGA GCTTCAAATA GTGAGGCTGG AAGCAAGCTT TATCTATATC ATAAGAAGAC	3780
TGGCGGTGAA AGAGGCTGTC TCCCCCAGT TGACTGGTGA CAGGTGTCAG AAGGAGCCAA	3840
GAGTAGTCCC CAATCCAAGG ACTGGGCTGG TGAGTTAACATC GAATCCCCTG AAAGATAGGC	3900
AGATGTGGAT CAAAAAACCA AGATCCATCC TGGTCACTGG TCTGGGGCAC AAAGTAATTG	3960

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ATCCCAAAAG GCACGCCGT GTATGGCAGG GTATTTCCC GAGAAAAGGC ATGCTTGTG	4020
GTAGTTCCAA AACGGGTATC GATGGTATCA AGTAGTGGTT TCATAGTCTT TCCTTTAGCT	4080
GTTTTCTAC ATTATATCAG TAATAGAGGG CCTTTAG	4117

(2) INFORMATION FOR SEQ ID NO: 101:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 2727 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 101:

CTGGTTCAAT TATTATTCAC TCTAAAGTAGT CATATGTTCT TTATTTATGT GAGTTTTTAC	60
CTTTTAAAGG ATCTTGTAG ATGGGAGAAG GTTTTAAAAG TGACAGATGA TAATACAAGA	120
AAAGTTCGTT TATTAGTAGC CTTTTTAGC ATTGTATAG GCTACATCCT GAGTTCTTC	180
TTTATTAGCC TGTATCATTT GTGGCAAGAA GCGCTTAGAG GATTATTATG AAATCAAGAG	240
TAAAGGAAAC GAGTATGGAT AAAATTGTGG TTCAAGGTGG CGATAATCGT CTGGTAGGAA	300
GCGTGACGAT CGAGGGAGCA AAAATGCAG TCTTACCCCTT GTTGGCAGCG ACTATTCTAG	360
CAAGTGAAGG AAAGACCGTC TTGCAGAATG TTCCGATTTT GTCGGATGTC TTTATTATGA	420
ATCAGGTAGT TGGTGGTTTG AATGCCAAGG TTGACTTTGA TGAGGAAGCT CATCTGTCA	480
AGGTGGATGC TACTGGCGAC ATCACTGAGG AAGCCCCTTA CAAGTATGTC AGCAAGATGC	540
GCGCCTCCAT CGTTGTATTA GGGCAATCC TTGCCCCGTGT GGGTCATGCC AAGGTATCCA	600
TGCCAGGTGG TTGTACGATT GGTAGCCGTC CTATTGATCT TCATTTGAAA GGTCTGGAAG	660
CTATGGGGGT TAAGATTAGT CAGACAGCTG GTTACATCGA AGCCAAGGCA GAACGCTTGC	720
ATGGTGCTCA TATCTATATG GACTTTCCAA GTGTTGGTGC AACGCAGAAC TTGATGATGG	780
CAGCGACTCT GGCTGATGGG GTGACAGTGA TTGAGAATGC TGCGCGTGAG CCTGAGATTG	840
TTGACTTAGC CATTCTCCTT AATGAAATGG GAGCCAAGGT CAAAGGTGCT GGTACAGAGA	900
CTATAACCAT TACTGGTGTGTT GAGAAACTTC ATGGTACGAC TCACAATGTA GTCCAAGACC	960
GTATCGAACG AGGAACCTTT ATGGTAGCTG CTGCCATGAC TGGTGGTGT GTCTTGATTC	1020
GAGACGCTGT CTGGGAGCAC AACCGTCCCT TGATTGCCAA GTTACTTGAA ATGGGTGTTG	1080
AAGTAATTGA AGAAGACGAA GGAATTCGTG TTCGTTCTCA ACTAGAAAAT CTAAAAGCTG	1140
TTCATGTGAA AACCTTGCCC CACCCAGGAT TTCCAACAGA TATGCAGGCT CAATTTACAG	1200

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CCTTGATGAC	AGTTGCAAA	GGCGAATCAA	CCATGGTGGGA	GACAGTTTC	GAAAATCGTT	1260
TCCAACACCT	AGAAGAGATG	CGCCGCATGG	GCTTGCATTC	TGAGATTATC	CGTGATACAG	1320
CTCGTATTGT	TGGTGGACAG	CCTTGCAGG	GAGCAGAAAGT	TCTTTCAACT	GACCTTCGTG	1380
CCAGTGCAGG	CTTGATTTG	ACAGGTTGG	TAGCACAGGG	AGAAACTGTG	GTCGGTAAAT	1440
TGGTTCACTT	GGATAGAGGT	TACTACGGTT	TCCATGAGAA	GTTGGCCAG	CTAGGTGCTA	1500
AGATTCAAGG	GATTGAGGCA	AGTGTGAGAAG	ATGAATAAGA	AATCAAGCTA	CGTAGTCAG	1560
CGTTTACTTT	AGTCATCAT	AGTACTGATT	TTAGGTACTC	TGGCTCTAGG	AATCGGTTA	1620
ATGGTAGGTT	ATGGAATCTT	GGGCAAGGGT	CAAGATCCAT	GGGCTATCCT	GTCTCCAGCA	1680
AAATGGCAGG	AATTGATTCA	TAAATTTACA	CGAAATTAGG	CTGGAGAAC	AGCCTTTTTC	1740
TAAAGATAAG	GAGAAATATG	AACAAAAAAA	CAAGACAGAC	ACTAATCGGA	CTGCTAGTGT	1800
TATTGCTTT	GTCTACAGGG	AGCTATTATA	TCAAGCAGAT	GCCGTCGGCA	CCTAATAGTC	1860
CCAAAACCAA	TCTTAGTCAG	AAAAAACAAAG	CGTCTGAAGC	TCCTAGTCAA	GCATTGGCAG	1920
AGAGTGTCTT	AACAGACGCA	GTCAAGAGTC	AAATAAAGGG	GAGTCTGGAG	TGGAATGGCT	1980
CAGGTGCTTT	TATCGTCAAT	GGTAATAAAA	CAAATCTAGA	TGCCAAGGTT	TCAAGTAAGC	2040
CCTACGCTGA	CAATAAAACA	AAGACAGTGG	GCAAGGAAAC	TGTTCCAACC	GTAGCTAATG	2100
CCCTCTTGTC	TAAGGCCACT	CGTCAGTACA	AGAATCGTAA	AGAAACTGGG	AATGGTTCAA	2160
CTTCTTGGAC	TCCTCCAGGT	TGGCATCAGG	TCAAGAATCT	AAAGGGCTCT	TATACCCATG	2220
CAGTCGATAG	AGGTCAATTG	TTAGGCTATG	CCTTAATCGG	TGGTTGGAT	GGTTTGATG	2280
CCTCAACAAAG	CAATCCTAAA	AACATTGCTG	TTCAGACAGC	CTGGGCAAAT	CAGGACAAG	2340
CCGAGTATTC	GACTGGCAA	AACTACTATG	AAAGCAAGGT	GCGTAAAGCC	TTGGACCAAA	2400
ACAAGCGTGT	CCGTTACCGT	GTAACCCTTT	ACTACGCTTC	AAACGAGGAT	TTAGTTCCCT	2460
CAGCTTCACA	GATTGAAGCC	AAGTCTTCGG	ATGGAGAATT	GGAATTCAAT	GTTCTAGTTC	2520
CCAATGTTCA	AAAGGGACTT	CAACTGGATT	ACCGAACTGG	AGAAAGTAACT	GTAACTCAGT	2580
AAAAGATACG	CCTACACTCC	TATGTCACTT	ATGGATGTAG	GAGTTCTTTT	TACTAGTTA	2640
ACCAGGACTA	AGACAGGTAC	TAAGACAAAA	TAGCAACTTC	AAAAACTAAC	TTCCAGTTT	2700
GGGAGAGAGA	TGGAAGTTAC	TTTGAGA				2727

(2) INFORMATION FOR SEQ ID NO: 102:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 5717 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 102:

TTTTTTGTAG ATTTAAGTGG GGTGCAATT CTAACAAATA AAAAACAAATT TTTGAAAATT	60
ATGTTAGCAG GAATTGCTTC AAATTCGATT TTATCACTTA CAGGTTACT TGTTTATTG	120
TTCACATCGT ATAAATTGCT TGGACTCTTA TTTTTATCA TTAACCTAGG TATGATTTT	180
ATTAATTCAA TTCCTTTTT TCAGTATGAT AGTGGTATTA TTTAAAGATA CTTGAATTCT	240
AAACAATAATA ACTTGAATT TCAATATATA GTTCAACTTT TAATAGCATT TGTTATTATT	300
TATTTTCCTT TGAGTCAACT ATTACAGTTT TTGACACCCA ATATTATTGT TCGTAGTATA	360
GGAGGGGTGG TTGTTTCTAT ACTGCTTCT ATATTATATA TGATAGGAAG GACGAAATAT	420
GTTCTACGTA AATAGTTATG TTTTGCTTA TAAAAAAGAA GGTATAATGT ATTTACGTGG	480
TCGGAGTATG CGGGAAATAG CTATAGAACCC TCAAATTTCG CAAGAATTAA TCAACGATCT	540
ATTTAATAGT TGTAAGAAC TATTAGAGAT AGAAGAAGTA TTAGGCAGTA AACTAACATT	600
TGAACTATAA ATGAACAAAT TTTAATTTCG GATGAGATAG ATATTGATAG TAGATATTCT	660
AGAACTAAAG GTTACTATTTC GTTATTCTT AATGAAGAGT ATAATAAAAT ACAGAATAAA	720
ACAGTATTAG TATTAGGAGC AGGAGTCTTA GGATGTTATA TATCTCTAAG TCTAAGTATG	780
TATGGAGTGA GGAAACTTAT TGTCGCTGAT TACGATATAA TAGAACCATC AAATTTAAAT	840
AGGCAAATTC TTTATACAGA GTCGGATGTT GGTAAGGAGA AGATTAATGT TCTTCTGAA	900
AAAATACACA AGTATAATT C AGATGTTCA GTAGTACCTA TTTCTATTAA AGTTTCTTCA	960
GTAGAAGAAT TAGAAAAAAT TGTTGCGGAA TATGGGAGTA TAGATTCTT CGTAAAGCA	1020
ATTGATACGC CCATTGATAT TATAAAATT GTCAATCAAT TTGCTGTATC GCATAAGATA	1080
TCCTACATAT CAGGAGGTT TAATGGATGC TATCTTATTA TTGATAATAT ATATATCCCT	1140
ACCATCGGTT CTTGCTTGG TTGTCGGAAT ATAAACAAAG ATATAAATAA GTACACTTA	1200
TCTGATAAGA CAAAGTGGCC GACTACACCA GAGATGCCTG CTATTTGGG AGGGATAATG	1260
ACTAATTAA TAATTAAAT ATTCTGGGA TGTTATAATG AAATCCTAAT AGATAACGCT	1320
TACGTTATA ATATGAGAAA TCATGCTCTA AGTCAAGAAA AATATGTTCT GGAAAACGGA	1380
GAATGTCAA TTTGTAAAAA AATAATAAAG TGAAAGATAA CAATATTAGA GCGAAAACAT	1440
TTATTCGTTCA AGTTGTTTT TGCTTATTAT CAGGAGGAGT AGCTTTTTA TCTGCTATTG	1500
GGCAGTTCAC TGTTATAGAA ACACAATTAA TAGTATTGTT CTTGGGTATT ATTTTGCTA	1560
TATATTATGC TTACTACAAT AAAAATATT C AAACATCATT GGAAAATATA GTATGGCTT	1620

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TTTCATCGTT	TGAGATTTA	TTTTGCTTG	TTAATTTAG	AACATTATT	CAGTTACCA	1680
TGGATATTT	TATTGGTATG	ATAATATTT	TAATGCTGTG	GATATTATT	ATGTTAGGTA	1740
TAGTGTGTCT	TAGTTATTAT	ATAACTTTAT	TATTTAGCAA	GGAGGCTTAG	TATGTTAAA	1800
AAAATAGGTA	TAATGAGCAT	TTGCATATAT	ATAATTATT	TATACTGCTT	GAGAATGTAT	1860
CGTATTATCA	ATAATATTGA	AACAATCTTG	CTAACGGTTA	TATGCTTAAT	GTTATTGTTT	1920
TTTTAAGAC	GTTTATTTGA	TAAAGATAAG	TAAATAGATG	TTAAGTAAA	ATGTAGAATA	1980
TAAAGGAGGT	GCAATGAGTA	TGATTGAAGT	TAGCCATTAA	TCAAAAAGTT	TTGGTGATAA	2040
AATAGCTTTA	AATAATATAA	GCTTCACTGT	TAAAGAAGGT	TAGATTTTG	GATTTTAGA	2100
ACCATCTGGT	TCTGGAAAGA	CCACAACGAT	TAATATTCTG	ACTGGGCAGT	TCCTGCCGA	2160
TAAAGGACAA	TCTATTATTT	TGGGACAAAA	ATCTCAAAAT	TTAACAAAGCG	GTGAATTAAA	2220
GAGAATTGGA	TTGGTTAGCG	ATACAAAGTGG	ATTTTATGAG	AAAATGTCTC	TGTATAACAA	2280
TCTTCTTTT	TATAGTAAAT	TTTATAATAT	TAGTAAATCA	CGTGTGATA	ATTTGTTAAA	2340
GCGAGTAGGA	TTATATGATA	GTCGCAAGAT	GGTAGCAGGA	AAATTATCCA	CTGGAATGAG	2400
GCAACGAATG	CTTTTAGCAC	GAGCTCTTAT	CAACAACCCC	GCTGTACTCT	TTCTGGATGA	2460
ACCGACCTCA	GGTCTAGATC	CCACAACCTTC	TCGAACAATT	CATGAGTTAA	TTTTAGAATT	2520
GAAAACAGCA	GGGACAACGA	TTTTCTAAC	GAETCATGAT	ATGAATGAAG	CAACTCTTT	2580
ATGTGATTAT	GTTGCCTTAT	TAAATAAAGG	GAAATTAGTT	GAGCAAGGAG	CTCCTCTGA	2640
ACTCATTCAA	AGATATAATA	AAGATAAAAA	GATTAAGGTT	ACAGATTATA	ATGGGAATCA	2700
GATAACTTT	GATTTACAT	CACTAGAAC	GGTATCTCAG	ACTGATCTGG	AAAATATT	2760
TTCAATTCA	TCATGTGAGC	CTACTTTAGA	AGATTTTTT	ATCACATTAA	CAGGAGGAAA	2820
GCTAAATGCT	TAAACGGTTT	CTGGCTTGG	TATGGTTGCG	TTGTCAAATC	ATCCTTCCA	2880
ATAAGAGTAT	TTTATTGCAA	GTGTTAGTGC	CTTTTGCTT	CACATATT	TATAAATATC	2940
TTATGGAAAC	ACAGGGGAAG	GTCAACGATC	AACAGGCATT	AGTTCTTTG	ATGATGTGTT	3000
TACCTTTTTC	TTTTCTTTG	GCTGTTGGAA	GTCCTATAAC	TATTATCTTG	TCTGAAGAAA	3060
AAGAAAAGTA	CAATTACAA	ACTCTCTGT	TGAGTGGTGT	TAAAGGCTCC	GAATACATT	3120
TATCAACTAT	GTTCCTTCCT	TTTTGCTAA	CTTTGTGAT	TATGGGAACT	ACTCCTTTA	3180
TTTTAGGAGT	TACAATTGTA	CATACTTTA	ATTATATTAC	AATCGTTCTT	CTAACCTCTT	3240
TATCCATCAT	TTTATTCTAT	TTATTGATAG	GTGTTAACCGC	GAAGAGCCAA	GTAGTAGCTC	3300
AGGTTATCAG	TCTTCCTGCT	ATGATTTAG	TTGCTTTCTT	ACCGATGCTA	TCTGGTTGG	3360
ATAAGACAGT	TGCGAAGATA	ACAGATTATA	GTGTTATGGG	ACTATTACT	AAGTTTTCA	3420

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CAAATGGGA	GGAATTTC	TGGAATAAAA	CTCTAATTCC	TAATCTAAC	CTACTTATT	3480
GGATTGTTCT	TCTATTA	ACTTTAACG	TAACATTAG	AAAAAAGAAA	ATTCTTAA	3540
TGAGTTAT	TTAATGATT	AAACACAA	GGGAAGGAAA	AAATGAAC	TGATCTT	3600
CAGCAATTCT	ACAGAATAG	CTTATTGCTA	TATTTTGATT	TGAGTGTAC	AAAAAAGAAA	3660
AATAACAATA	GTGCTCATAC	TAATTGCAGA	AGTTTG	GATAAGATAA	CTGATAAATT	3720
GCAATAAAA	ATGCAACATT	TTTAAATCTC	CTCTATAAGT	GCTTC	GTGCTCAA	3780
ACCTGTCTTG	TAATCCAAGT	ATTTTG	ACGGTGATTA	ATAAGCTAC	AAAGCATCAT	3840
TAAGGATTT	TTCGGTAATT	GTGCAA	CGGTTAAGA	AAATACTC	GAAGAAGTCC	3900
ATTCGCATTC	TCATTACTTC	CCCTTGCC	AGATGAATAG	GCATCCG	AAATAAACAG	3960
AATTCCCATT	TGTTCAATT	AAGGGTAACA	AGCAA	ACTCTGT	CCGAA	4020
AGTCTTAA	TATTCTTG	GAAAGAGT	TGTGAGG	TCAATAGC	TCAACATG	4080
TTTAGCTGTT	TTTACTTGAC	AAAGT	GCTAGT	AGAAATAA	GAATAGT	4140
AGCAGTCCAG	AGAGGCAGCT	AAGGT	AGAC	GGTGA	GGAGACTAC	4200
TGGAACCTTG	CTGTTGGCAG	GTT	CGT	TGTTGCCAG	ACTCTCTC	4260
TAGTAAAGGT	AAAAGGAGAA	ACCTATGCGA	GAACATCG	CAATCAT	TCTGATT	4320
CCTAGTTTG	AGGCGGTCAA	GGAATT	TGCT	CAGCAGAAGA	AA	4380
CTCAAGGTAG	GGATGGAGCT	TTATTACGCA	GC	GGGGCCTG	AGATTG	4440
GGTTGGGTC	ATAGTGTCTT	TTGGATCTC	AAACT	TCATG	ACATTCTAA	4500
TCAGCCATGA	AGATCTTGTC	TCAGCTTGGT	GTCGATATGA	CTAATGT	TGCGG	4560
GGTGTAGAGA	TGATGAAGGC	GGCGCGT	GA	GTCAAG	ATTGATCG	4620
GTAAC	TCACATCAAC	GTCAGAAGCT	CAGATGC	AGTTCA	TATCCA	4680
AGTCTGCAAG	AGTCTGTGAT	TCAC	TAATGCC	CTGAAGCT	GGT	4740
GTTGTTGCT	CGGCTCAGGA	AGTACAAGTC	ATCAAGC	CTACCA	AGATT	4800
TGTCTGACAC	CAGGGATT	TC	GTTGCA	GAGATCA	ACGAGTC	4860
ACACCTGCTG	ATGCC	TATCA	AATCGG	ACT	TGGATG	4920
CAAAGCTGAGG	ATCC	TGTG	AGCTT	TATCAT	GCCATCA	4980
AATTAAAGAA	CTAGATTAGA	AAAATAAAG	GAGAAT	ACCA	TGACACT	5040
GCTAGCCACC	TCTTGAAAT	CCAAGCCGTT	TACCTCA	AC	CAGAGGA	5100
GCATCTGGTA	TCAAGTCACC	GATT	TACACT	GATAATCG	TGACACTAGC	5160

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ACTCGTACCC TAATTGAAAA TGGTTTTGTG GAAGCTATCA AAGAACCTT TCCTGAAGTA	5220
GAAGTGATTG CAGGAACCTGC AACAGCAGGG ATTCCACACG GAGCCATTAT TGCTGATAAG	5280
ATGGACTTGC CTTTTGCCTA CATCCGTAGT AAACCAAAAG ACCACGGAGC TGGTAATCAA	5340
ATCGAAGGTC GCGTAGCTCA AGGTAAAAA ATGGTAGTGG TTGAAGACCT TATTCAACG	5400
GGTGGTTCAG TTCTTGAAGC TGTAGCAGCA GCCAAGCGAG AAGGAGCAGA TGTACTTGGA	5460
GTTGTAGCGA TTTTCAGCTA CCAATTGCCA AAAGCAGATA AGAACCTTGC AGATGCTGGT	5520
GTTAAACTTG TGACGCTTTC AAACATAGC GAGCTTATCC ATCTAGCCC AGAAGAAGGT	5580
TACATCACGC CAGAGGCCCT TGATCTTCTA AAACGCTTTA AAGAAGACCA AGAAAATTGG	5640
CAAGAAGGTT AGGTCAGTAA GATAAAGAGA GACGAGGCTA CCGAGTCTCT TTTACCATTT	5700
TATTTAAAAT ATGACAG	5717

(2) INFORMATION FOR SEQ ID NO: 103:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 5558 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 103:

CCTGGACTTT CTAAAATGAA ATCTTGCAC CTGGATCAAG CCCTTCATGA GCATTTTCA	60
GAAGAAGAAT TAGCTGGTCA CTTTCATGTC CTTCTATGGA CTTTTTTTAC AATGGCATTG	120
CTATCACACC CAATACCTAT CTAAGCGCCT GTTTCGTAAA CTTTATTGCA GCTCTTCCTC	180
TAAATTTCCCT AATTGTTGAA CCAATTGCCCT GTTTTATACT AAGTTCTTTT CAGAAACCAT	240
TTACTGGGGA AGAAGTTGAA GATTTCAAG ATGATGATGA AATCCCAACT ATTATCTAAG	300
CCAGTTCTGT AAAACTACTAA TATTGAAAT CCACTTCCTT TTAGGGTGCA ATGGTTATAA	360
ATGAATTTTT GAGAGGATCA GAATGAAAAA ACTAGCAACC CTTCTTTAC TGTCTACTGT	420
AGCCCTAGCT GGGTGTAGCA GCGTCCAACG CAGTCTGCGT GGTGATGATT ATGTTGATTC	480
CAGTCTTGCT GCTGAAGAAA GTTCCAAAGT AGCTGCCAA TCTGCCAAGG AGTAAACGA	540
TGCTTTAACAA AACGAAAACG CCAATTCCC ACAACTATCT AAGGAAGTTG CTGAAGATGA	600
AGCCGAAGTG ATTTTCCACA CAAGCCAAGG TGATATTGCG ATTAAACTCT TCCCTAAACT	660
CGCTCCTCTA GCGGTTGAAA ATTTCCCTCAC TCACGCCAA GAAGGCTACT ATAACGGTAT	720
TACCTTCCAC CGTGTACATCG ATGGCTTTAT GGTCCAAACT GGAGATCCAA AAGGGGACGG	780
TACAGGTGGT CAGTCCATCT GGCATGACAA GGATAAGACT AAAGACAAAG GAACTGGTTT	840

771

CAAGAACGAG ATTACTCCTT ATTTGTATAA CATCCGTGGT GCTCTTGCTA TGGCTAATAC	900
TGGTCAACCA AACACCAATG GCAGGCCAGTT CTTCATCAAC CAAAACCTCA CAGATACCTC	960
TTCTAAACTC CCTACAAGCA AGTATCCACA GAAAATTATT GAAGCCTACA AAGAAGGTGG	1020
AAACCCTAGT CTAGATGGCA AACACCCAGT CTTGGTCAA GTGATTGACG GTATGGATGT	1080
TGTGGATAAG ATTGCTAAGG CCGAAAAAGA TGAAAAGAC AAGCCAACTA CTGCTATCAC	1140
AATCGACAGC ATCGAAGTGG TGAAAGACTA CGATTTTAAA TCTTAAAAC CAAAAAAATA	1200
CAGTATCCAC ATTCGGTACT GTATTTCTTT TACTCTCATT CTTAAGTTAA ATTATTAAGA	1260
TCCCATATTG GGTCTATCCA GCCTTCATAA AAGTCTGGCT CGTGGCAGAC CATAAGGATA	1320
GATCCCCTAT ATTCTTGAG AGCGCGTTTG AGCTCATCCT TTGCATCCAC ATCCAAATGG	1380
TTGGTCGGCT CGTCCAGCAC TAAAACGTTG TTTTCACGAT TCATCAAGAG ACAGAAACGA	1440
ACCTTGGCTT GCTCTCCCCC TGATAAATCT TGAATCTGGC TTTCAATATG TTTGGTTGTC	1500
AAACCACAAAC GGGCAAGGGC TGACCGACT TCTGCTTGAT TAAGGGCAGG AAAGGCATTC	1560
CAGACAGCTT CAAGAGGAGT TTGGCGATTA CCGCCTTCTA CTTCTGCTC AAAATAACCA	1620
AGTTCTAAAT AATCTCCACG CTCCACTTCC CCAGCGATTG GCGAGATAAT GCCCAAGAGA	1680
CTCTTCAAGA GAGTTGTTTT TCCAATACCA TTAGCACCAA TAATCGCAAC CTTTGATTG	1740
CGTTCGAAGG TAAGATTAA AGGCTTAGTA AGAGGACGGT CGTAACCAAT TTGCAAGTTC	1800
TTGGCTTGGGAGATAAAAGCG CCCTGGTGTGTA CGAGCTGGTT TGAAATCAA GGATGGTTTT	1860
GGTTTCTCAC TTTGGAGTTC GATAATATCC ATCTTATCCA ATTTCTTTG ACCAGACATA	1920
GCCATATTAC GAGTTGCAAC ACGGGCTTTA TTACGAGCCA CAAAGTCCTT GAGGTCTGCA	1980
ATCTCTTCT GCTGGCGTTC GTAGGCTGCC TCTAGCTGAG ATTTCTTCAT AGCATAAACT	2040
TCTTGGAACT GGTAGTAGTC ACCAGAGTAA CGCGTCAGCT GTTGATTTTC CACATGATAG	2100
ACAATATTAA TAACGTCATT GAGGAATGGA ATATCGTGCG AAATGAGAAC AAAGGCATTC	2160
TCATAGTTTT GGAGATAGCG CTTGAGCCAA TCAATATGCT CAGCATCCAA GTAGTTGGTC	2220
GGCTCGTCCA ACAGCAAGAT ATCAGGCTTT TCAAGGAGAA GTTTGCCAA AAGCACCTTG	2280
GTTCTTGCC CACCTGACAA AGAAGTTACA TCCGTATCCA TGCCAAAGTC CATAACACCA	2340
AGAGCACGCCG CTACTTCGTC AATCTTAGCA TCCAAGGTAT AGAAATCACG ACTCTCCAGA	2400
CGGTCTTGAA GTTCTCCATAC TTCTTCCATG AGAGCATCAA CATCCGCGCC GTCTTCAGCC	2460
ATTTTCATAT AGAGGTCAATT GATACGAGCT TCAGCTTGA AAAGCTCATC AAAAGCCGTA	2520
CGGAGAACAT CACGCACCGA CTGTCTTCA GCAAGGACAG AGTGCTGATC CAAGTAACCA	2580

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GCCGTCACAT	ATTTGGACCA	CTCAACCTTT	CCTTCATCTG	GCAGCATT	TTT ACCAGTCACG	2640
ATACTCATAA	AGGTTGATTT	TCCTTCACCA	TTGGCACCGA	CCAGGCCGAT	ATGTTCTCCC	2700
TTGAGGAGAC	GGAAGGACAC	ATCTTCAAAA	ATTGCACGGT	CACCAAAACC	GTGACTCAGA	2760
TTTTTAACCT	CTAAAATACT	CATTAAATT	CCTTACCTTG	TTTTTATGTA	ATCGTTTATA	2820
AAGGAGCCAA	GCCAGATAGC	CACCCAAAGT	GTTGGTCCAC	AAATCATCAA	TCTCAAAGAC	2880
GCGATTGAAA	TCAAAGAAAAA	AGTCCAAGAT	TAATTGCGTA	CACTCGATTC	CAAGACTCAC	2940
AAGAAAAACTA	AAAAGAAGGA	CCTTTTTGT	TTTCCGAAA	TTTGGAAATA	GATAAAGGAG	3000
TTGGAAAATC	AGAGGAAAAAA	ACAAGAAGAC	ATTGAGGATA	TTTTGTAAAA	AAATCCAACA	3060
TAATTGTCCA	ATGTCACTCA	CTTCGCCAG	TTTCCAGAGA	GAATTGAAAG	GAGTCAAAAG	3120
AAAAACCAGG	CGTCCAAGAT	GCTGAATACC	TGGAGTTCCC	ACTCCCACGG	TAGATTGTT	3180
TTGAGGAGTA	AAGCAAAAAC	AGACAATGCA	AATGCTATAG	AAAATGACTC	CCCAGACCAA	3240
AATATGATTA	TAAGTCTTCT	TCATCATTAA	GGATTTACCG	CTGCGACTGC	CTTCTGGCGG	3300
TCACGTTTCA	TTGTGTTAGA	GCGCAATTGT	CCACAAGCTG	CGTCAATATC	TGTACCATGC	3360
TCTTGACGAA	CCACACAGTT	GACCCCTTT	TTCTTAAGCG	TATCATAGAA	AGCCAACACG	3420
CACTCTTGG	GACTACGGCT	ATATTGGTCA	TGCTCACTAA	CTGGGTTATA	AGGAATCAAG	3480
TTTACATAAG	ACAATTCTT	GATGTTCTTG	AGCAATTCA	TCAATTCAA	GGCTTGTCT	3540
ACACCGTCGT	TGACTTCATT	AAGCATGATA	TATTCAAAGG	TTACACGACG	GTTTGTGTC	3600
TCAATGTAGT	ATTCAATAGC	AGCAAAGAGT	TTTCAATCG	GAAAGGCACG	GTTAATCTTC	3660
ATGATACTTG	AACGAAGTTC	ATTGTTAGGT	GGGTGAAGAG	ACACGGCAAG	ATTGACCTGA	3720
ACCCCTTCAT	CAGCAAAGTC	ACGAATTTA	TGAGCCAAAC	CTGAGGTTGA	AACCGTGTG	3780
TGACGAGCAC	CGATAGCCAT	TCCTTATCA	TCATTGATAG	TACGAAAGAA	ATTCAAGACA	3840
TTGTTGTAAT	TATCAAAGGG	CTCACCGATT	CCCATGACAA	CGATATGGCT	GATGCGTTCA	3900
TCCTGACCAC	GCTCATCAA	GTATTCTGA	ACCAGCATGA	TTTGCCTAC	GATTCACCG	3960
TTATTGAGGT	CACGTTGCTT	CTTAATCAA	CCAGAGGCAC	AGAAGGTACA	ACCGATATTA	4020
CAGCCGACCT	GAGTGGTCAC	ACAGACAGAT	AAACCATACT	GTTGACGCAT	GAGTACAGTC	4080
TCAATTAAACA	TACCGTCGGG	CAATTCAAAG	AGATATTGA	CTGTACCATC	AGCAGACTCT	4140
TGCACAATAC	GTTGTTCAA	GGGATTGACC	ACAAACTGGT	CATTGAGCTT	AGCAATCAA	4200
TCCTTGGAAA	GGTTGGTCAT	TTCTTCAAAT	GACTGCACAC	GTTCACGGTA	GAGCCATTCC	4260
CAGATTGAT	CTGCACGGAA	TTTCTTTCT	CCCTGCTCCA	ATACCCATTC	CTGCATGGTT	4320
TGATGTACCA	AACTATGAAT	TGAGGGTTTC	ATTTCTTCTC	CTTATTCTCT	ACTCACTTCT	4380

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GACGAATGAC AAAATGACGT TGTCCTTGT CGCTTTCTG ACGACGTCTA TTTTCTTAT	4440
CTGCATTCTGA CTTTCGTTA GTTGAGTCG GTTCTTTCC TTTCTAGAA GGTGTTCTT	4500
CTTCCGTCTT ACGCATTTC TTGTCAAATG ATGCTCGTT AGGGGCTTCA TTTCTAAAGA	4560
CAAAATAGGC ACAACCATAA CTACAATACT CTAAAAGGT A GTCTGTAAA CGACTGATT	4620
TTTCAAGTTT TTCTCTGTT CGGTACATCCT TGTAAAAACC TCGTAGGCGA AGCTGTTCGT	4680
TGCTCCAGTC CCCACGATA TAATCAAAC TGGTTAACAC TTCTGAAAAA CGCTGATTAA	4740
AAGTCGTAC ATCAAAGGC TCCTTGATAT TTTCAACCAA GGAAAAAGCT ATCCCTTCCG	4800
TTTCGACCTT GTCCCCGTGT AAATGGAAC CCGGACCAGG AAACTTGTTA TAGTTGTATA	4860
ATTCAAGGTGC AATTCTTTT CGCATAGATA TCCTTTTTC ACGATTACTT AATACTTAT	4920
TCTACCATAA TTCTCTAGCAG TTAGCACGTT TCTCATAAAA ATGAAAAAAG TCTGACGATT	4980
TTGTCAGACC AGAATCTTAT AACCTAAAAA GAGAAGAAC ATTCTTCCCT CCAACTATCA	5040
TTTATTAGCA GCTGCGTACA ATTCACTAC TTTATTCCAG TTGATTACTG AAAAGAAAGC	5100
TTTGATGTAG TCAGGACGCA CGTTGCGGT A TTTCACGTAG TAAGCATGTT CCCAACGTC	5160
CAAGCCCAAG ATTGGTTTTT TACCTTCTGA GATTGGTGTG TCTTGGTTG CTGTTGAAGT	5220
CACTTCAAGT TTCCCTTCTT TGTTGACAAC CAACCATGCC CAACCTGAAC CAAAACGAGT	5280
TGTTGCTGCT GCAGTGAAGG CTGCTTGGAA TTCTTCAAAT GAACCAAATG TTGCATCGAT	5340
TGCTGCTGCC AGTTCTGCTG AAGGAGCTGT TTTCTCGGG A GTCATCAAATT CCCAGAAAAG	5400
AGCGTGGTTC AAGTGTCCGC CACCATTGTT GATAAGTGCT TGACGGATAT CAGCTGGAT	5460
AGATTCTACA TCAGCAAGCA AGGCTTCAAG GTCTTCACCG ATTTCAGGGT GTTTTCTAA	5520
AGCTGCATTG GCATTGTTGA CATAAGTTG ATGGTGT	5558

(2) INFORMATION FOR SEQ ID NO: 104:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6735 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 104:

GGAATTGTAA ATATCATATT GTTTTGCAC CAAATATCG TCGTCAAATC ATTTATGGCA	60
GATACAAAGC TAGTATCGGA AGAACATAC GTGACTTATG TGAGCGTAAG GGTGTAATAA	120
TCCATGAAGC GAATGCTTGT TCAGACCATA TTCACATGCT TATCAGTATT CCTCCGAAAC	180

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TTAGTGTTC GTCCTTATG GGCTATTAA AGGGCAAGAG CAGTTGATG ATTTTGATA	240
AGCATGCGAA TTTAAAATAC AAATATGGCA ATCGCAAGTT TTGGTGTAGA GGCTATTATG	300
TAGATACGGT AGGCCGTAAT CAGAAAGTGA TAGCTGAATA TATTCAGAAT CAATTACAAG	360
AAGACAGAGT AGCAGACCAAG CTCACGTTAT TCGAGTCAGT AGATCCGTTT ACTGGCGAAA	420
TAAATAAGAG GAAGTAACTA AGGTGCTTA GCACCTGCTC GGGAAAGTGG TGCGCGAGGA	480
AGCTATTCG GTGGGCCCTT GGCCCTGGCC GGTAGAAGCG GCTTATAGCC GCAGAACAAA	540
CCACCAGTTC ACACTGGTGG TTTGATTTA AAAAACTTGA TACATAAAA TAAAAGTCTA	600
TATAAAGGAT GGTAAAATTC CTGTTGTCCG ATTTGGACAA TATCCTAAAT AGTTACAATA	660
TATGGTCTAT ACTTTTCTT AGGAGAAAGC TAGATGTACA GACGTTGAG AGATTTGAGG	720
GAGGATCATG ATCTGCCCA AAAGCAAATA GCTACAATAC TTTCGTTAC AAATTCAAGCT	780
TATGCCAAA TTGAACGGGG TGAGCATGCG TTGACGGCTG ATGTATTGGT TAAACTCTCA	840
GATTCTATG ACGTCAGTAC AGACTATTTA TTGGGATTAA CTGATTTCC TGATAAAATT	900
CGCTTAGAA AATAATCTCC TCAATTCAT AGAGTTGAA AATGAGTGAG ATTTTTTATT	960
TGCCCTTTGA CAACTGAATA GCCTAAAATG GTACTTTCTT CATTGTGGA GCAAATTGAA	1020
ATGGCTCGCC ATGATAAGAG CGATTTAAA ATCATCAATA AAATAGAGCG ATACTTTATA	1080
TGCCATGATA CAAATGATAT ACAATGATAC TTCTGACCGT TCAGCCTGCC AACGTAAAAG	1140
AGCAGCAAGT GAAATTCTTA TGATGACTTC ATCAGTCATG CCACGTTGAA TGTGTGAGTT	1200
TGTTAGATAA ACGCAATTAA CCCTCAAAAG GTTCCCCGAA CCTTTGAGT TCTACAGACG	1260
CATCACGTGG AGTGTGTAAG CTTGTTGCTA AAAGCGTAA AACCTGGAA CGAAAGGAAT	1320
AATAGACTTT CTGCGAAACA AAAATATAAT ACAATAAAAC TATGAATGAT GAAGCAAGTA	1380
AACAATTGAG CGATAGCCGT TTCAAGATCC TTGTAGGTGT TCAGCGCACG ACTTTGAAAG	1440
AGATGTTAGC TGTGTTAAAA ACAGCTTATC AACGTTAACG CGAAAAGGT GGACGAAAAA	1500
GCAAATTAAG CCTAGACGAT CTCCTTATGG TAACTATTCA ATACATGCGA GAATAGAGCA	1560
CTTATGAACA AATTGCGGCT GATTTGGCA TTCACGAAAG CAACTTAATC CGTCGGAGTC	1620
AATGGGTTGA AGCAACTCTT ATTCAAAATG GTTTTACGAT TTCAAATTCT GCCTTAATTC	1680
TGTAAAAACA GTAAAATTCG AAGGATTGTA AGGTAAGAGT TTTTTCTTT CTGAAAAAAT	1740
GGTATAATAG CAATCAAAAC TAGAAAATAA AACGGAATTG GGAACAGATT TGTCTGTATC	1800
CTAGTAGAGT GGTGATACTA TGAAGATTAG TAAGAGGCAC TTATTAAATT ATTCCATCTT	1860
GATTCCCTAC TTGCTTTAT CTATTTGGG CTTGATTGTC GTCTATTGCA CCACCAAGTGC	1920
TATTTAATT GAAGAAGGCA AGAGCGCCTT GCAGTTGGTT CGAAACCAAG GAATCTTTG	1980

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GATTGTTAGT TTGATACTGA TTGCCTTAAT TTATAAATTG AGACTAGATT TTTTGAGAAA	2040
TGAGCGACTA ATCATTCTAG TTATATTAAT AGAAATGCTT TTATTGTTCT TGGCTCGTT	2100
TATTGGTATT TCCGTAAACG GGGCATAACGG TTGGATTCG GTTGCAGGAA TAACTATTCA	2160
GCCAGCTGAG TACTTAAAAA TCATTATTAT TTGGTATTAA GCTCACCGAT TCTCCAAACA	2220
GCAAGAAGAA ATAGCTACTT ATGATTTCA AGTTTGACT CAAAATCAAT GGCTTCCCCG	2280
TGCTTTAAAT GATTGGCGAT TCGTCTCCT AGTTCTGATT GGAAGTTGG GAATTTCccc	2340
TGATTTAGGA AATGCGACTA TTTTAGTCTT GGTTCCCTG ATTATGTATA CAGTTAGTGG	2400
AATCGCTTAT CGCTGGTTT CAACCATTCT GGCGCTCGTA TCTGCCGCTT CTGCTTTGT	2460
CTTGACCAC TACAGCCTAA TCGGTGTTGA GACCTTTCA AAAATTCCAG TATTGGCTA	2520
TGTAGCCAAG CGCTTCTAGTG CCTTTTTAA TCCCTTGCC GATCGTGTG ATGCAGGTCA	2580
CCAGTTAGCT AATTCTTATT TTGCATGGT CAAATGGCGGT TGGTTGGTC TAGGTCTTGG	2640
AAACTCGATT GAAAAACGAG GTTATTTGCC AGAAGCTCAT ACAGACTTTG TCTTTCTAT	2700
CGTGATTGAA GAATTGGCT TTGTTGGTGC CAGTCTTATT TTAGCTCTCT TGTTTTCAT	2760
GATTTTGCAG ATTATCTTGG TCGGTATCCG AGCGGAGAAT CCTTTCAATG CCATGGTGC	2820
ACTCGGTGTC GGAGGGATGA TGTTGGTCA GGTATTTGTC AATATCGGAG GGATTCGGG	2880
CTTGATTCCA TCTACAGGAG TGACTTTCCC CCTCTTATCC CAGGGTGGAA ATAGCTTCT	2940
AGTCTTATCA GTGGCAGTAG CCTTTGTCTT AAATATTGAT GCCAGTGGAA AACGCGCTAA	3000
ATTGTACCGA GAATTGGAAA ATCAACCAAT GAAACCTCTG TTGAAGTAGG ATAAAGAAAG	3060
GATAGTTAT GTCTCTCAA AAATTAGAAA ATTATAGTAA TAAAAGTGT GTGCAAGAAG	3120
AAGTCTTGAT TCTAACAGAA TTACTGGAAG ATATTACTAA AAATATGCTT GCCCCAGAGA	3180
CCTTGAAAAA AATAATACAG TTGAAAGAAT TATCAACGCA GGAAGATTAT CAAGGTCTAA	3240
ACCGTCTAGT GACTAGCTTA TCAAATGATG AAATGGTCTA TATTTCACGC TATTTCTCTA	3300
TCTTGCCCTCT TTTGATTAAT ATTCAGAGG ATGTGGATTT AGCTTATGAA ATCAATCATC	3360
AAAATAATAT TGATCAGGAC TATTTAGGTA AATTATCTAC AACGATTAAA TTGGTAGCAG	3420
AAAAGGAAAA TGCCGTTGAG ATCCTAGAAC ACTTGAATGT TGTCCCTGTT TTGACAGCCC	3480
ATCCAACACA AGTGCAACGC AAAAGTATGT TGGATTTAAC AAATCATATT CATAGTCTTT	3540
TGCGTAAATA CCGTGATGTT AAGTTGGGGT TGATCAATAA AGATAAAATGG TACAATGATT	3600
TGCGTCGTTA CATCGAAATT ATCATGCAGA CAGACATGAT TCGTGAGAAA AAATAAAAG	3660
TGACTAACGA AATCACGAAT GCTATGGAAT ATTATAACAG CTCCTTTTG AAAGCTGTAC	3720

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CTCATTGAC GACGGAGTAT AAGCGCTAG CGCAAGCGCA TGGTCTGAAT TTAAAACAGG	3780
CTAAACCAAT CACCATGGGT ATGTGGATAG GTGGTGACCG TGATGGAAAT CCATTTGTTA	3840
CAGCAAAGAC CTTGAAGCAG TCTGCACTCA CTCAGTGTGA AGTCATCATG AACTACTATG	3900
ATAAAAAGAT TTACCAACTT TATCGTAAT TTTCTCTTTC AACTAGCATT GTCAACGTCA	3960
GCAAGCAAGT CAGAGAAATG GCTCGTCAAT CCAAGGATAA CTCGATTTAC CGCGAAAAAG	4020
AGCTTTACCG TCGTGCCTTG TTTGATATTTC AATCAAAAAT TCAGGCAACT AAAACCTATC	4080
TGATTGAGGA TGAAGAAGTT GGGACTCGTT ATGAAACCGC CAATGATTTC TACAAGGATT	4140
TGATTGCCAT TCGAGATTCT CTACTAGAAA ATAAGGGCGA GTCCTTGATT TCAGGTGATT	4200
TTGTGGAATT ATTGCAGGCA GTAGAGATAT TTGGTTTTA CTTAGCATCA ATTGATATGC	4260
GACAAGACTC TAGCGTCTAT GAAGCCTGTG TGGCAGAACT CTTGAAATCA GCAGGAATT	4320
ATTCTCGTTA TAGCGAGTTG AGCGAAGAAG AAAAGTGTGA CCTTCTCTTG AAAGAATTAG	4380
AAGAAGATCC CCGAATTCTT TCTGCGACTC ACGCAGAAAA ATCAGAATTAA TTAGCAAAAG	4440
AATTAGCTAT TTTTAAGACG GCTCGTGTG TGAAAGATAA GTTGGGAGAT GATGTCATCC	4500
GTCAGACCAT CATTTCACAT GCAACCAGCC TTTCTGATAT GCTAGAATTAA GCTATTCTGT	4560
TTAAAGAAGT AGGACTGGTG GATACGGAAA GGGCGCGTGT TCAGATTGTT CCCCTTTTG	4620
AAACAATTGA AGACTTGGAT CATTCAAGGG AAACAATGAG AAAATATCTT TCTCTTAGCC	4680
TTGCCAAAAA ATGGATTGAC TCACGAAATA ACTACCAAGA AATCATGCTT GGCTACTCTG	4740
ACAGTAATAA AGATGGCGGT TACTTGTCAAT CATGTTGGAC CCTCTACAAG GCTCAACAAAC	4800
AATTGACTGC TATTGGAGAT GAATTGGCG TTAAGGTTAC CTTCTTCCAT GGCGTGGTG	4860
GTACTGTCGG TCGTGGTGGT GGGCAACCT ATGAAGCCAT TACATCTCAA CCGCTCAAGT	4920
CTATCAAGGA TCGTATCCGC TTGACGGAGC AGGGTGAAGT AATTGGGAAT AAATACGGTA	4980
ACAAAGACGC CGCTTACTAT AACCTGAAA TGCTAGTATC GGCAGCTATT AACCGTATGA	5040
TTACTCAGAA GAAGAGCGAT ACCAATACCC CAAATCGTTA TGAAACCATT ATGGATCAAG	5100
TAGTGGACCG TAGTTACGAT ATCTACCGTG ATTTGGTCTT TGGTAATGAG CATTTCATG	5160
ATTATTTCTT CGAGTCAGT CCAATCAAGG CTATTTCAAG TTTTAATATT GGTTCTCGTC	5220
CAGCCGCTCG TAAGACTATT ACTGAAATCG GTGGTTTGC G TGCCATCCCT TGGGTATTCT	5280
CATGGTCACA GAGTCGTGTT ATGTTCCCTG GATGGTACGG GGTGGTTCA AGCTTCAGG	5340
AATTATCAA TAAAATCCA GAGAATATTG CTATCTTACG AGATATGTAC CAAAATTGGC	5400
CTTTCTTCCA ATCGCTTCTT TCAAATGTTG ATATGGTTT GTCAAAATCA AATATGAATA	5460
TTGCTTTGA ATATGCTAAA CTTTGTGAAG ACGAGCAAGT TAAGGCCATC TATGAGACTA	5520

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TTTTAAATGA ATGGCAAGTT ACTAAGAACG TTATCTTGGC TATTGAAGGA CATGACGAAC	5580
TCTTAGCTGA CAATCCATAT CTAAAAGCTA GTCTGGATTA CCGTATGCCT TACTTTAATA	5640
TTCTCAACTA TATTCAGTTG GAGTTGATTA AACGCCAACG TCGTGGAGAA TTGTCCAGTG	5700
ATCAAGAACG ATTGATTCA ATCACCATCA ACGGAATTGC GACAGGATTG CGTAATTCA	5760
GTTGATAATT TTCAAGAGTG AATGCTAAAA GTGAATATCA AAAAAATTCT AATAGACTAT	5820
TGACAAGTAG TTTAAAAATG ATATAATTCA ACCATTCAAGA AAAGTAATCA TACAAACTTT	5880
TTAGAGAGTC TGTGGTAGCT GAAAACAGAT AAGTGGCAAT GATGAAAATT GGGCTGAATG	5940
CTATTTAGAA TTTGAAATTA TAAAAATTG GTAAGCACAC CTTACAGTGC ATCTCGTTAT	6000
TGCGAGACTG AGCGATAGGG AAATTCCCTA TAATTGAGGT GGTACCGCGC ATCGACGTCC	6060
TCACACAAAGT TTTTGTGTG AGGATTTTT TGATGGAGGT TAGTATGGAA AGAAAACGAT	6120
GGCGTCGCTT GTTTAGATAA GTGAAATATG TTAAAGGAAA TAAAAAGGAG AAACAGAATG	6180
AAAAATAAAC GTTTAATTGG AATTATTGCT GCATTAGCAG TCTTAGTGC AGGAAGCTTG	6240
ATTTATTCTT CAATGAATAA ATCAGAAGCT CAGAATAATA AGGATGAGAA GAAAATAACC	6300
AAGATTGGTG TGCTTCAATT TGTGAGCCAT CCATCCCTTG ATTTGATTAA TAAAGGGATC	6360
CAAGATGGAC TTGCAGAAGA AGGATATAAA GATGATCAAG TTAAATTGA TTTTATGAAC	6420
TCAGAAGGTG ACCAAAGTAA GGTTGCGACA ATGAGTAAAC AATTGGTTGC AAATGGAAT	6480
GACCTTGTGG TTGGTATCGC AACACCAGCA GCCCAAGGGT TGGCTAGTGC AACAAAAGAC	6540
CTACCGGTTA TCATGGCCGC TATTACAGAC CCAATTGGTG CTAACCTGGT TAAAGATTG	6600
AAAAAACCAG GTGCCAACGT TACAGGGGTA TCTGACCACA ATCCAGCTCA ACAACAAGTT	6660
GAACTCATCA AGGCTCTGAC ACCGAATGTG AAAACAATCG GAGCTCTTTA CTCAAGTAGC	6720
GAAGACAATT CAAAA	6735

(2) INFORMATION FOR SEQ ID NO: 105:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6516 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 105:

CTAGAGGATC CCAGCAGGTA AATTGGCTTC AGCTGGCAAA AAAGTTGCC TCGTTGAACG	60
CAGCAAGGCT ATGTACGGTG GAACTTGTAT CAACATTGGT TGTATCCAA CTAAAACCTT	120

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GCTAGTTGCT	GCTGAAAAGG	ACTTGTCTTT	TGAAGAAGTC	ATTGCTACTA	AAAACACGAT	180
CACTGGTCGC	CTCAACCGTA	AAAACATATGC	GACTGTTGCT	GGTACAGGCG	TAGATATCTT	240
TGATGCGGAA	GCTCACTTCC	TTTCAAATAA	AGTCATCGAA	ATCCAAGCTG	GTGATGAAAA	300
GAAAGAACTG	ACTGCTGAA	CAATCGTCAT	CAACACTGGT	GCTGTTCAA	ACGTCTGCC	360
AATCCCTGGA	CTTGCTACAA	GCAAAAACAT	CTTGACTCA	ACAGGTATCC	AAAGCTTGGA	420
CAAATTACCT	GAAAAACTTG	GAATCCTTGG	TGGCGGAAAT	ATCGGTCTG	AATTGCCGG	480
CCTTTACAAAC	AAACTTGGAA	GCAAGGTAC	AGTCCTAGAT	GCCTTGGATA	CATTCCCTACC	540
TCGTGCAGAA	CCTTCCATCG	CAGCTCTTGC	TAAAACAATAC	ATGGAAGAAG	ATGGCATTGA	600
ATTGCTTCAA	AATATCCATA	CTACTGAAAT	CAAAACGAT	GGTGACCAAG	TGCTTGTGCGT	660
AACTGAAGAC	GAAACTTACC	GTTCGACGC	CCTTCTCTAC	GCAACTGGAC	GCAAACCAAA	720
TGTAGAACCA	CTTCAACTTG	AAAATACAGA	TATTGAACTA	ACTGAACGTG	GTGCTATTAA	780
AGTAGACAAA	CACTGTCAAA	CAAACGTTCC	TGGTGTCTTT	GCAGTTGGAG	ATGTCAACGG	840
TGGCCTTCAA	TTTACTTACA	TTTCACTTGA	TGACTTCCGT	GTTGTTACA	GCTACCTTGC	900
TGGAGATGCC	AGCTATACAC	TTGAAGACCG	TCTCAATGTG	CCAAATACTA	TGTTCATCAC	960
ACCTGCACTT	TCACAAGTTG	GTTCGACTGA	AAGCCAAGCA	GCTGATTGAA	AACTTCCATA	1020
CGCTGTTAAG	GAAATCCCCG	TTGCAGCAAT	GCCTCGTGGT	CACGTAAATG	GAGACCTTCG	1080
CGGTGCCTTC	AAAGCTGTTG	TCAATACTGA	AACAAAAGAA	ATTCTTGGAG	CAAGCATCTT	1140
CTCAGAAGGT	TCTCAAGAAA	TCATCAACAT	CATCACTGTT	GCTATGGACA	ACAAGATTCC	1200
TTACACTTAC	TTCACAAAAC	AAATCTTCAC	TCACCCAACC	TTGGCTGAGA	ACTTGAATGA	1260
CTTGTGCGG	ATTAAAGTTG	AGATTTAAC	GTATCGAAC	GCCCTCTTG	GGCTGTTTT	1320
ACTTCTGCGG	AATCTCAAAT	CTGTCTTCT	CCTCTTTAT	GATATAATAG	AAACATGAAC	1380
TTAAAAACTA	CTTTGGGCCT	TCTTGCTGGG	CGTTCTTCCC	ACTTCGTTTT	AAGCCGTCTT	1440
GGACGTGGAA	GTACGCTCCC	AGGGAAAGTC	GCCCTTCAAT	TTGATAAAGA	TATTTACAA	1500
AACCTAGCTA	AGAACTACG	GATTGTCGTT	GTCACTGGAA	CAAATGGAAA	AACCCTGACA	1560
ACTGCCCTCA	CTGTCGGCAT	TTTAAAAGAG	GTTCGAAACA	ACCTTCCTAA	CAGCCAAATC	1620
GGTGCCAAACA	TGATTACAGG	GATTGCAACA	ACCTTCCTAA	CAGCCAAATC	TTCTAAAAC	1680
GGGAAAATA	TTGCCGTCT	CGAAATTGAC	GAAGCCAGTC	TATCTCGTAT	CTGTGACTAT	1740
ATCCAGCCTA	GTCTTTTGT	CATTACTAAT	ATCTTCCGTG	ACCAAGATGGA	CCGTTTCGGT	1800
GAAATCTATA	CTACCTATAA	CATGATATTG	GATGCCATTC	GGAAAGTTCC	AACTGCTACT	1860
GTTCTCCTTA	ACGGAGACAG	TCCACTTTTC	TACAAGCCAA	CTATTCCAAA	CCCTATAGAG	1920

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TATTTTGGTT TTGACTTGGA AAAGGGACCA GCCCAACTGG CTCACTACAA TACCGAAGGG	1980
ATTCTCTGTC CTGACTGCCA AGGCATCCTC AAATATGAGC ATAATACCTA TGCAAACCTG	2040
GGTGCCTATA TCTGTGAAGG TTGTGGATGT AAACGTCTG ATCTCGACTA TCGTTGACA	2100
AAACTGGTTG AGTTGACCAA CAATCGCTCT CGCTTTGTCA TAGACGGCCA AGAATACGGT	2160
ATCCAAATCG GCGGGCTCTA TAATATCTAT AACGCCCTAG CTGCTGTGGC CATGCCCGT	2220
TTCCTAGGTG CCGATTCGCA ACTCATAAA CAGGGATTTG ACAAGAGCCG TGCTGTCTT	2280
GGACGCCAAG AAACCTTCA TATCGGTGAC AAGGAATGTA CCCTTGTCTT GATTAAAAAT	2340
CCAGTCGGTG CAACCCAAGC TATCGAAATG ATCAAACTAG CACCTTATCC ATTTAGCCTA	2400
TCTGTCTCC TTAATGCCAA CTATGCAGAT GGAATTGACA CTAGCTGGAT CTGGGATGCA	2460
GACTTTGAAC AAATCACTGA CATGGACATT CCTGAAATCA ACGCTGGCGG TGTCGTCAT	2520
TCTGAAATCG CTCGTCGCT CCGAGTGACT GGCTATCCAG CTGAGAAAAT CACTGAAACG	2580
AGTAATCTGG AGCAAGTTCT CAAGACCATT GAGAATCAAG ACTGCAAGCA TGCCTATATT	2640
CTGGCAACTT ATACTGCCAT GCTGGAATTT CGTGAACACTGC TGGCTAGTCG TCAGATTGTT	2700
AGAAAAGGAGA TGAACTAATG GTTTATACTT CACTTCCTC AAAAGATGGC AATTACCCCT	2760
ATCAGCTCAA CATTGCCAC CTCTACGGAA ATCTCATGAA TACTACGGGG ACAATGGAAA	2820
CATCCTCATG CTCAAGTATG TGGCTGAAAA ACTGGGAGCC CATGTGACCG TTGACATCGT	2880
TTCTCTCCAT GATGACTTTG ATGAAAATCA CTACGACATC GCCTTTTCG GTGGTGGTCA	2940
AGACTTTGAA CAAAGTATCA TTGCAGACGA CCTACCTGCT AAAAAGAGA GCATTGACAA	3000
CTACATCCAA AACGACGGTG TAGTTCTGGC TATCTGCGGT GGTTCCAAC TATTGGTCA	3060
ATATTATGTT GAAGCTTCAG GAAAACGTAT CGAAGGGCTA GGGGTCATGG GACACTACAC	3120
GCTCAACCAG ACCAATAACC GTTTTATCGG TGACATCAAG ATTACAAATG AAGATTTCGA	3180
TGAAACCTAC TATGGATTTG AAAATCACCA AGGTCGTACC TTCCTCTCTG ATGACCAAAA	3240
ACCGCTGGGA CAGGTTGTCT ATGGAATGG AAACAAACGAA GAAAAGGTG GTGAAGGGGT	3300
TCATTATAAG AATGTCTTTG GTTCTACTT CCACGGGCCT ATCCTCTCTC GTAATGCCAA	3360
TCTGGCTTAT CGCCTAGTTA CTACTGCCCT CAAGAAGAAA TATGGTCAGG ACATCCAAC	3420
CCCTGCCTAT GAGGACATTC TCAGCCAAGA AATCGCTGAA GAGTACAGTG ACGTCAAAAG	3480
CAAGGCTGAC TTTTCTTAAA CAAAGGAAAA TGATATCAA GAACTCCGTT ATCTGTCGG	3540
AGTTTTTGT CTTTCTTT ACCCTCTCC CTTGCATTT CTCTCATTTC TTGCCAAAAT	3600
AGAGGGGTAG AAAGAAGGTA GCATATGTCT AAATTACAAC AAATCCTAAC ATATCTGAA	3660

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TCAGAAAAAC TAGACGTCGC TGTCGTATCT GACCCCGTCA CAATCAATTAA	CCTCACTGGT	3720
TTTTACAGTG ATCCCCATGA ACGCCAAATG TTCCCTCTTG TCCTAGCAGA TCAGGAACCT		3780
CTCCTCTTG TCCCAGCTCT TGAAGTAGAA CGTGCAAGTA GCACCGTTTC CTTCCCAGTA		3840
GTGGGCTATG TCGATTCTGA AAATCCATGG CAAAAAAATCA AACATGCTCT TCCACAACTT		3900
GACTTCAAAC GTGTCGCTGT TGAGTTTGAC AATCTCATCT TGACCAAATA CCATGGTTTG		3960
AAAACAGTTT TTGAGACTGC TGAGTTTGAC AACCTCACTC CTCGTATCCA ACGCATGCGC		4020
CTCATCAAAT CAGCTGATGA AGTGCAAAAA ATGATGGTTG CAGGTCTTTA TGCTGACAAG		4080
GCTGTTCATG TTGGTTTGAA CAATATTCT CTTGATAAGA CTGAGACAGA TATCATCGCA		4140
CAAATCGACT TTGCCATGAA ACGTGAAGGT TATGAAATGA GCTTGATAC CATGGCTTG		4200
ACTGGTGATA ATGCTGCGAA TCCACACGGC ATTCCAGCAG CTAATAAGGT TGAAAATGAT		4260
GCTCTTCTCC TCTTGACCT GGGTGTCTG GTCAATGGCT ATGCGTCAGA TATGACTCGT		4320
ACAGTCGCTG TCGGCAAACC AGACCAAATTC AAGAAAGATA TTTACAACCTT GACTCTTGAA		4380
GCCCAACAAG CTGCTCTGAA CTTTATCAAG CCAGGTGTGA CTGCTCATGA AGTGGACCGC		4440
GCTGCCGTG AGGTCACTCGA AAAAGCTGGT TATGGTGAGT ACTTCACCCA CCGTCTCGGG		4500
CATGGTATCG GTATGGATGTT CCATGAATTTC CCATCTATCA TGGAAGGAAA CGACATGGTC		4560
ATCGAAGAAG GCATGTGCTT CTCTGTTGAA CCAGGTATCT ATATCCCTGG TAAAGTCGGT		4620
GTTCGTATTG AAGACTGCGG TGTTGTTACC AAGGATGGCT TCAACCTCTT TACAAGCACC		4680
AGCAAAGATT TGCTTTATTT TGATTAACCT ATATAGCCCC TATGCTTCC TTTCAAAATA		4740
TCTAGGGCT ATTTTATTGT CATTCTCTG CTATTATGCT AAAGAAATTG GCTGCAATAA		4800
TCTAACCTCA AGTGTCTGGA ATGATAACGA GGGTGTCTC CGCTTTTATC AAAGACAAGG		4860
GATGAAACCC CAAGAAACAA CAATGGAAAT GATAATTGAT TAAGAAGTCA TCTATCAAAA		4920
GATGTTAGAA AAAGTTCAAT TTCACTAGAA AATGAGGAAA ATCTCCCCAC AATAAAACGC		4980
ATAGTATCAG GTATTGTGTA CTGACCCCAA ACAGTTAGAC AATTAATTAA TCCGAAGGAT		5040
TAGTTCTGT ACTGCACAGG ACTAAGTCCT TTTAGTTTA CCTTAATTG TTTGTTGTTG		5100
TAGTAATCAA TATAGTCTAT AATGACTTGT TCCAATTGGT TAAGTGATT AAATGTTTC		5160
TCATAGCCAT AAAACATTTC GGATTTAAA ATGCCAAAGA AAGATTCCAT CATAACGTTG		5220
TCTGGCTGT TTCCCTTGCG TGACATAGAT GCTTGAATTTC CCTTATTCTC TAGGAACCGA		5280
TGATAAGAAT CGTGTGGTA TTGCCAGCCT TGCTCACTAT GGAGAATCGT ATTCTCGTAG		5340
TGCTTCTCTT TGAATGCCTG TTCCAACATT GTTTGTACTT ATTCTAAATT AGGCGAACAA		5400
GAAAGATTAA AAGCAATAAT TTCGCTGTTA AAGCCATCTA AAACCTGGTGA TAAGTAAAGC		5460

781

TTTTGAGTAC TTGCTGGAAT GGCAAATTCA GTCACATCTG TGTAGCACTT TTCCATTGTT	5520
TTAGAGCCTT CAAATTGGC TTGAATGAGA TTCTCTGCCT TCTTACCAAC GTCTCCTTTA	5580
TGAGAAGAAC ATTTCGTTT CTTTCGCATT TTAGCTGTA AATTGAGTAC TTTCATCAAG	5640
CCTTGAACTC TTTTATGATT TACCAAGATAA CCACGATTTC TTAGTTCTAA ATGAACCCGG	5700
CGATAAGCAT AATTCCCTT GTGTTCGATA AAGATGGATT GAATTTCACT TTTAAGCTCT	5760
TGGTCTTAT CTGTTTGTC TAGCTGTTTC AAGTGATAGT AGTAGGTCCA ACGAGCTAGT	5820
TTAATGGCTT CTAGAAGAAG ATCTAACGAA AACTCAGTCA TTAATTCTTG AACAAATTCT	5880
GTCTTCTTC TTTCTCTTT TCCTCCTTCA ATCGGAGTTC TCTTAACCTT TTTAGGATGG	5940
CATTCTCCGC TCTCAGGTAC TCTCCCTCTT GTTTCTCAA CAATAGTATA CCCGTTTTC	6000
CTGTATTGTG CTAGCCAGTT AAGAAGTATC GTACGACTTG GGAGACCGTA TTCAAGAGAA	6060
ACTCTATCTT TAGTCCAGCC TTCATGTCAG ACTTTATTAA CCCCATTAT TCACCCAAA	6120
TCTAAAAACC ATCCAGAAC CTTGCCCTAG CTTAGATCCT GGATGGTTTC TTTTTTCACC	6180
CAATGGGTGT TTTTACTAG ACAAAAAAGA GTTTCCCCTT TATGGTATAA GTGTAGAAAA	6240
AAACACAAAA AGAAAGGAAA CTCACATGAA CAGTTTACCA AATCATCACT TCCAAACAA	6300
GTCTTTTAC CAACTATCTT TCGATGGAGG TCATTTAAC CAGTATGGTG GTCTTATCTT	6360
TTTCAGGAA CTTTTTCCC AGTTGAAACT AAAAGAGCGG ATTTCTAAGT ATTTAGTAAC	6420
GAATGAmCAA CGCCGCTACT GTCGTTATTC GGATTTCAGAT ATCCwtGTCC AGTTCCCTTT	6480
TCAACTGTTA ACAGGTTATG GAACGGAATA TGCTTG	6516

(2) INFORMATION FOR SEQ ID NO: 106:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14654 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 106:

TTTTCAACCC ATATCGTGGC TCCTGAATAC TACTTACTGA CAACTATGCT ATCAGAGACT	60
TCTCTACTTG TTTTCTATAT CATTTCATC CATAGAAAAC AACTCATCCA CTTGGGACAT	120
ATCTTTAGCT ATACTGTTCG ATACTCTCTC TTTTCACTTT CCTTTGTAGC AATTTATTTC	180
CTGATTAATT TCGTGTATCC TGTAGATATG GTCATTAATT TGCCATTTT GATTAATACT	240
GGTTTGATTG TCTTGCTATC AGCTATCTCT TATATTAGTC TACTTGTCTT CACAAAAGAT	300

782	
AGCATTCT ATGAATTTT AAACCATGTC CTAGCCTAA AAAATAATT TAAAAAATCA	360
TAGGAGTTA AAATGAAACA ACTAACCGTT GAAGATGCCA AACAAATTGA ATTAGAAATT	420
TTGGATTATA TTGATACTCT CTGTAAAAG CACAATATCA ACTATATTAT TAACTACGGT	480
ACTCTGATG GGGCGGTTCG ACATGAGGGC TTTATCCCTT GGGACGACGA TATTGATCTG	540
TCCATGCCA GAGAAGACTA CCAACGATT ATTAAACATT TTCAAAAGGA AAAAAGCAAG	600
TATAAGCTCC TATCCTTAGA AACTGATAAG AACTACTTTA ACAACTTTAT CAAGATAACC	660
GACAGTACGA CTAAAATTAT TGATACTCGA AATACAAAAA CCTATGAGTC TGGTATCTT	720
ATCGATATTT TCCCTATAGA TCGCTTGAT GATCCTAAGG TCATTGATAC TTGTTATAAA	780
CTGGAAAGCT TCAAACGTCT GTCTTCAGT AAACATAAAA ATATTGTCTA TAAGGATAGC	840
CTTTTAAAG ATTGGATACG AACAGCCTTC TGGTTACTCC TTGACCGGT TTCTCCTCGT	900
TATTTGCAA ATAAAATCGA GAAAGAAATT CAAAATATA GTCGTAAAAA TGGGCAATAT	960
ATGGCTTTA TCCCTCAAA ATTTAAGGAA AAGGAAGTCT TCCCAAGTGG TACCTTTGAT	1020
AAAACAATCG ATTTACCCCT TGAGAATTAA AGCCTCCCTG CACCTGAAAA ATTTGATACT	1080
ATTTGACAC AATTTATGG AGATTATATG ACCCTACCAC CAGAAGAAAA ACGCTTCTAC	1140
AGTCATGAAT TTCACCGCTTA TAAATTGGAG GATTAGGATG CAATATTAG AAAAAGAAGA	1200
AATTAAAGAA ATTCAACTAG CCCTGCTGGA CTATATTGAT GAGACTTGTA AGAAACATGA	1260
TATTCCTTAT TTTCTCAGTT ATGGAACCAT GCTTGGAGCC ATCCGCCACA AAGGTATGAT	1320
TCCTTGGGAT GATGATATTG ATATTTCCCT TTATCGTGGAG GATTATGAGC GTTTACTGAA	1380
GATTATTGAA GAAGAAAATC ACCCTCGCTA CAAGGTTCTT TCCTACGATA CATCTTCTTG	1440
GTACTTCCAT AATTCGCA CGATTTGGAA CACTTCTACT GTTATAGAAG ACCATGTTAA	1500
GTACAAGCGT CATGATACCA GCCTTTCAT CGATGTCTTC CCAATTGATC GATTACAGA	1560
CTTGAGCATT GTCGACAAGA GCTATAAGTA TGTGGCTCTT CGTCAACTAG CTTATATCAA	1620
AAAATCACGA GCAGTTCACG GTGATAGCAA ACTAAAAGAT TTTCTTAGAT TATGTAGCTG	1680
GTACGCTCTC CGATTTGTCA ATCCCTCGCTA CTTTTACAAG AAAATTGATC AACTAGTCAA	1740
AAATGCTGTA ACCAACACTC CTCAATATGA AGGAGGAGTT GGGATCGGTA AGGAAGGGAT	1800
GAAAGAAATC TTCCCAGTTG ATACCTTTAA AGAACTGATT TTAACTGAGT TTGAGGGCCG	1860
TATGTTGCCT GTTCCCAAAA AATATGACCA ATTTTAACC CAGATGTATG GCGATTATAT	1920
GACACCACCA TCAAAAGAAA TGCAAGAGTG GTATAGTCAT AGCATTAAAG CTTATCGCAA	1980
AAACTGATTG AGGGGGATTA TACAAACTAC TAAGATAGAG GTTATTCAAA AACATAATTG	2040
TAGTAGAAAA TGAAATACAT ATTCCCACAA TAAAACGCAT CATATCAAGG TTTTGAAAAA	2100

783

ACCTTGATAT GATGCGTTT ATAATTTAA AGACTTTTT CTATAGTAGA TTGAAATAAG	2160
ATGCGAACAA ATCAATTAGA AAATTCAAAT TAATTTATAG AAATATTTA GTATTCCTGT	2220
GTACTGTTCT AAATTCAAGTC TGCTATATCT TATTTTCTA TTTAAATCGC TTCTGTAACA	2280
AAGCTACGAC TTTCAAGTAC CTTAACCATG GCATTAGCTG TATCTAGCGC TGTGAAGAGG	2340
GGCACCCCGT GTTCAATGGC TGAACGACGA ATTTGCTCAC CATCTCGTC AGCAGTCGT	2400
TTTGTTCCTA CTGTGTTAAT GATAGCTTGA ATTCTTCCTT TGCACACAAA ACTTGGGATA	2460
TCCTTATCGT CATCACCAAT CTTACCAACA GGTTGGGCTT GCAAGCCATG ACTAGCAAAG	2520
AAGGCTGCTG TCCCTCTGT CGCAAGGATT CCATAACCAA TGTTTGGAA ACGACGAGCC	2580
AAGTTCAAGG CTTCTCTTT GGCATCATCA GCGATGGTAA AGACGACATT ACCAAAAGTT	2640
GGCAAGTGTGATAAGAAGC TTCAAAGGCT TTATAGAGAG CTTTTTCCAA AGTAGCATCA	2700
GAACCCATAA CTTCACCTGT TGACTTCATT TCAGGACCGA GCAAGCTGTC TACCTTAGCT	2760
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CCATTGGT AGCCAAGTTC TGATAAACCTT TGACCAAGAA TGAGTTGGT CGCTACTTGA	2880
GCCATAGGAA TATTGGTTAC CTTAGATAGG AATGGAACAG TACGGCTGGC ACGTGGATTG	2940
ACCTCAATAA CGTAGACTTT TTCATCCTTG ATAACAAACT GGATGTTCAT CATTCCAAGG	3000
CAGTGAAGAC CGATTGCTAA GCGTTGGTG TAGTCTGGCA TGGTCTCCTG AACCTTTGC	3060
GACAAGGTTT GTGGTGGGTA AACAGCCATT GAGTCACCTG AGTGGACACC AGCACGTTCG	3120
ATATGCTCCA TGATACCAGG AATGAGTACA TTTTACCAT CTGAAATGGC ATCAACTTCG	3180
CACTCTGCC CAACGATATA AGAGTCGACA AGAACTGGGT GGTCTGGACT AGCCTTAACA	3240
GCAGTTCGCA TGTAAGAACG AAGGTCTTCT TCGTTTCAA CGATTTCCAT GGCACGTCCA	3300
CCAAGTACAT AAGATGGCG GACAAGAACT GGGAGCCAA TCTTGCGAGC TGCAAGAGCT	3360
GCTTCTTCTT CATTGGTAGC CGTTGCTCT GGTGGCTGTG GAATATCCAA TTCTTGAGA	3420
GCTTGCTCGA AGAGGTACG GTCTCGGCA CGATCTAGGT CAGCAACCTG TGTACCAAGG	3480
ATGGTCACAC CTGCTTTGC CAATGGCTCC GCAAGGTTGA TGGCTGTTG ACCACCGAAC	3540
TGAACGATAA CTCCCTTGG TTGTTCCAAG TCAATGACGT TCATAACATC TTPGAATGTC	3600
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GAGTTCATGA TGATAGCTTC ATAACCAGCT GCCTGGATAG CCTTAACAGA GTGAACGGTT	3720
GCGTAGTCAA ACTCAACCCC TTGACCGATA CGGATTGGAC CTGAACCTAG GACAAGTACA	3780
GATTCTTAT CAGATCTGAT AGATTCAATT TCCCAACCAT AGGTTGAATA GAAATATGGC	3840

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GTTCGGAGT CGAACTCTGC CGCACAAAGTG TCTACCACATCT TATAAACTGG AACAACTTTG	3900
TTTTCCAAGC GAAGTTGGCG AACTTTATCA TCAGTCGTT CCCAGAGTTTC AGCAATCTTA	3960
CGGTCTGAAA AACCATTAAAG TTTGGCTGTT TTCAAAACTT CTAAATCTTG TGGATGAGCA	4020
CCCAATTCTT GCTCAATTTC AAAGATATGC AAGAGTTTAT CAAGATAGAA GATATCAATT	4080
TTTGTAAAGCT CTGCAATTTC TTCAGGTGTG TAGCCACGAC GAATGGCTTC TGATACGTAG	4140
AAGAGACGGT CATCTTGGGC TTTGACAACC TTTCAATCA AGGCATCATC AGAAACTGCT	4200
GCAAGTTCAAG GTATTTCATT GTGGTGCACC CCAATTCAA GGGAGCGGCA GGCCTTGAGA	4260
AGAGATTCCCT CGATGTTACG ACCGATTGCC ATGACTTCTC CAGTCGCCTT CATTGTGTA	4320
CCGAGACGGC GTTCACCCCTT TTCAAACCTTG TCAAATGGGA AACGTGGAAT CTTAGCAACT	4380
ACGTAGTCAA GGGCTGGTC AAACATGGCA TAGGTTGAAC CTGTAACCTGG GTTTATAACC	4440
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CGAATAATGC TCAAGCTCGC ATCACGAAGC ATTTGGTTTT CATACTCTGA CATGGTTGCG	4680
GCAGGGGCAA ATACAATGGA ATCCCCCTGTG TGAATCCCAA CTGGGTCAA GTTTTCCATG	4740
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GTTGCAGGAT TTGAGTTAAC CAAAACAACC TCATAACCTT CCTCTTTCAA CGACAAGCAA	5340
GCCTGAGTCC CAGCGTAGTC AAACTCAGCA GCCTGACCAA TAATAATCGG ACCAGAACCA	5400
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CTATTCTCGTCG CCTCTCAGGG CGACATTAAA TAAGATACAA AGGACGAATA GAAAGCGATT	5640

785

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TTCCGTCCGT GTTCAGTTAC ATAAATTCTC CGACGAGCTT TTACTCGTTC TTAGTTGAT	5760
TGTTTAAAAA CTTCCATCAT CTCGATAAAC TCGTCAAATA GGTAGCTAGC GTCGTGTGGC	5820
CCAGGAGCTG CATCTGGGTG GTATTGAACA GAGAAAGCAG GTTGGTATCT GTGGCGCACA	5880
CCTTCCACTG ACTTGTCAATT GATTCTTCG TGGGTAATAA TCAAGTGCTC TGGCAAATCC	5940
TCGCGGCTGA CTGCATAACC ATGGTTCTGG CTGGTGAAGT CTACTCGTCC TGGTGCATT	6000
TCACGTACCG CATGGTTGAA TCCACGGTGG CCAAACCTCA TCTTATAGGT CTTAGCCCCG	6060
TTTGCCATTG CAAAGAGTTG GTGTCCCATA CAAATACCAA AGATTGGAAT TTTTCCTTGT	6120
ACACCGCGAA TCATGTCGAG TGCTTGTGGA ACGTCTTCTG GGTTACCTGG ACCATTGAC	6180
AAACATAACTC CGTCAGGATT GAGATGGAGA ATTTCTTCAG CCGTTGTCCG ATAAGGAACAA	6240
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TCCACTAGCA CCACGCTCAA ACCAACCTCT GGAGCTGGAT AAGACGTTT AGTAGAAACC	6360
TGTTTGATAT TGTCTGTCGG TAAAACTGTT GCTTGGAGCT GGTCCGTAC ATGGTCCATA	6420
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GGATAAGTAA AGGTCAAGAT TTGTCCATTA TAAGACTGGT CTGTAATGGA TTCTTGGTAG	6720
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ATAGTCTGCA AACTCTTGAC TTCTCCATTG CTCAGGTCCA GCGAAAAAGA GTTCAGCTCC	7260
CAAGCGTTTC AAAATCTGCA TATTGGATTT GGCAACGCGT GAGTGGTCCA AGTCACCTGC	7320
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CAAGCTCTGG	CTAGGGTGT	GGCCCGAAC	ATCTCCACCA	TTGATGATGG	AAGTCGTAAT	7440
CGTTGGACTA	GCAATCAATT	CTCTATAGTA	GTCGACCTCT	GGATGGCGAA	TCACACAGAC	7500
ATCCACTCCT	AAAGCAGACA	GAGTCAAAAT	GGTGTCAAA	AGTGTCTCAC	CCTTATTAAC	7560
CGAGCTAGTC	TTCACATCAA	AGTCAAGTCG	TTCCAATCCA	AGTTTAATCT	CTGCGACTTC	7620
AAAGGACTTA	TGTGTCCGTG	TAGAATCCTC	AAAGAAGAGA	TTGGAAACAA	TCGGATGGTC	7680
TTCATAGGGA	AGCTGGGCTC	CATTTTAAA	CTCAATTCC	CGCTTGATCA	ATTCATTAC	7740
TTGATCGACA	GTGAGGTCTT	CCATGGACAC	CACATGGTTC	AATGCTTGT	GATTTCTGA	7800
CATGGCTACT	CCTTTAACTT	TCTAAGCTTC	TTCAAGTATC	AGAACTCTGT	CTTGGTCATC	7860
AAAGTCTGTC	ATCTCTACGA	TGATTTCTTC	AGAACGACTG	GTTGGGATAT	TTTTCCAAC	7920
GTAATCTGGA	CGGATTGGCA	ATTCTCTATG	TCCACGATCG	ACTAGAACTG	CTAAACTCAC	7980
ACGCGCAGGA	CGACCATGAC	CGACAATATT	ATCAATAGCA	GCACGGATGG	TACGACCTGT	8040
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CATGACAAAC	CTCCAAAAG	AAAAGTCTCC	TTAAACAAGG	AGACTTGAAA	TTTATAGCCA	8400
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TGGGTACTGG	TCACACTCTG	GATTTTTGG	ATGGCAAATG	GCTCTTCCAA	AATAAATCAT	8640
GGCCTGATGG	GCAGCTAAC	ACTGCTCAGG	CGGCAAGATA	TCCATGACCC	GCTTTTCCAC	8700
CTCAAGTGGC	GTCGCTGATT	TTTGACAAT	ATCGTGGTGT	TTGCAAATAC	GCTCCACATG	8760
AGTATCCACT	GCAAAGGCTG	GAATTCCAAA	TCCTACACTC	ATGACAACAT	TGGCTGTCTT	8820
GCGACCAACA	CCTGCCAAC	TCTCCAATTC	TTCACGTGTC	TGAGGGACTT	GACCATCAA	8880
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GGTACGGCAG	ATGATATTG	ACTACAAGAG	CTGCTAAACA	CTACTATGCA	AGAGCTCAA	10020
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AGTCTTCTGA	TTGGACTGGG	TAGCCTAAAA	CTAAACGATC	AAGCACGGAC	TGCTTGGCGA	10140
AACTATGATA	AATTCCATTA	CGATCATGTC	AAACACGTAC	TAAGTCTCTA	TGGACCTGTT	10200
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GCTTTTGTT	ATGCACTATG	AACATTCTAG	AAAGGGAAAT	CATATGATAA	AAATCAATCA	10500
TCTAACCATC	ACACAAAACA	AAGATTACG	AGATCTTGT	TCTGACCTAA	CCATGACCAC	10560
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CTATCAGTCA	CTGGCCTACA	TTCCCTCAAA	AGTCCCTGAG	GACCTAAAAA	AGAAAACCTT	10740
ACACGACTAC	TTCTTTTAG	ATTCTATTGA	TTTAGACTAC	AGTATCCTCT	ATCGTTGGC	10800
GGAGGAATTG	CATTTTGATA	GCAATCGTTT	CGCAAGTGAC	CAAGAGATTG	GCAATCTATC	10860
AGGGGGCGAA	GCTTTGAAAAA	TTCAGCTTAT	CCATGAGTTA	GCCAAACCT	TTGAGATTCT	10920

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ATTTTTAGAT GAACCTCAA ATGACCTAGA CCTTGAGACCA GTTGATTGGC TAAAAGGCCA	10980
GATTCAAAAG ACCAGGCAAA CCGTTATTTT CATTCCCCT GATGAAGACT TTCTTCTGA	11040
AACGGCAGAC ACTATTGTTC ACTTGCGACT GGTCAAACAC CGTAAAGAAG CGGAAACGCT	11100
AGTAGAGCAT TTAGACTATG ATAGCTATAG TGAGCAGAGA AAGGCTAATT TTGCCAAACA	11160
AAGTCAGCAA GCTGCTAACCA ACCAAAGAGC CTACGATAAA ACCATGGAAA AACATCGGAG	11220
AGTTAAGCAA AATGTAGAAA CTGCGCTTCG AGCTACCAAA GATAGTACTG CCGGTCGCCT	11280
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ACCATTACCA GCTTCTAAAG TCTTAGTCCA ACTGGAAAAA GAAAATTGT CCATTGACGA	11460
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ATCTGGCGGA CAACAGGGAA AACTCCTGCT TTTGGATTAA GTCCTGGC AACCAAACCTT	11820
TCTCCTGCTG GATGAACCCA CACGAAACTT TTCTCCCCT TCTCAACCCC AAATCAGAAA	11880
ACTCTTGCT ACCTATCCAG GCGGTCTCAT CACTGTTCG CATGACCGTC GTTTCTTAAA	11940
AGAAGTCTGC TCGATCATCT ATCGCATGAC AGAACACGGT TTGAAGCTAG TTAATTAGA	12000
AGATTTATAA ATTTGCAACA TAGAAAAAT CCAGAGACGA CCTCTGGATT CTTTTACATC	12060
TGTTTAAAC GTTCAATCCG TTCTGAGATA GGTGGGTGGG TATAAAAGAG TTTTTGGAAC	12120
CCCCCACCTT TCTTAGGATC ATTGATATAA AGGGCACTGC TAGCATCATC GACGTGGCGA	12180
CTCATAGGTT TGCTATTGTC CAACTTATCT AGGGCATTAA TCATTCCCTG GGGATTGCGA	12240
GTCAGCTCGA CACTAGATGC ATCTGCCAGA AATTCCCTCT GACGAGAAAT AGCGAGCTGA	12300
ACCAAGGTG CAGCGAGAGG TGCCAGTACA ATAGCTAGTA GGGAAACAC TAGCATAATG	12360
ATTTCAAGAC CATTCCATC TCGGTCTCATCA TCACCTCGTC TGCGACCTGC TCCACCCAC	12420
CACATCATAC GACCTGCCAT ACTAGAAAGC ATGGTGATAG CACTAGCAAG GGCAACTGCA	12480
ATAGTCGAAA TACGGATATC ATAATTACGA ATATGACTGA CTTCATGTCC CATAACAGCT	12540
TCTAGTTCTT CACGATTCT GATAGCTAGT AGACCTGAAG TCGCAGCAAC AGCCGCATTT	12600
TGAGGATTAG AACCTGTCGC AAAGGCATTT AAGGCTGGAT CATCAATGAT GAAAACACGG	12660
GGCATAGGAA TCTGAGCGAC CAGAGCCATA TCTTCCACTA CATGGTAGAG GTCTGGTGC	12720

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GTTTGCTCAT	CCACCTCACG	CGCTCCATT	ATGGACATGA	CAATCTCTGT	CGATTGAAAA	12780
ATCATAGACA	AAGCGTAGAT	AAAGCCGATA	ATCAGTGCAA	TAACCAAACC	ACCAAGTCCA	12840
GATCTTATAA	AGAGATAACC	AACCGCATAA	CCAACAAGAG	CTAAGAGTAG	GAAAAATACC	12900
AGCAACAAAA	TCCAGGTTT	TCGTTTATTG	CTTGCAATT	GATCAAACAA	CATCTTAGTC	12960
ACCTAAACCG	CTAAAATCAA	CTTTAGGAAC	CGACTTTCC	TCTTCAGGTG	TTTGAAGGAA	13020
ATCTGCCGCT	TTAAATCCAA	ACATTCCAGC	GATAATATTG	CTCGGGAAAG	TTTCTAATT	13080
TACATTGTAG	TTGCTGACAA	CACTGTTATA	GAGTTGACGA	GAGTAAGAAA	TTTTATTTC	13140
TGTGTTTGTC	AACTCCTCTT	GCAATTAAAC	AAAGTTAGCA	CTAGCTTCA	AATCTGGATA	13200
GCTTTCTGCA	ACTGCAAAAA	TACCTGAAAC	CTGACGAGTG	AGGGCATCAC	TGGCTTCAT	13260
AGCTTCTGCT	GGTGAAGTCG	CTGCCGCCAC	TTGGTTACGT	AGTTCTGCCA	CCTTTCAAG	13320
GGTAGAACCT	TCATATTG	CATAACCTT	TACAGCTCA	ATCAAGTTTG	GCAAGAGGTC	13380
ATTGCGACGT	TTCAACTGAA	CATCAATCTG	ACTCCAAGCC	TCCTTGTTT	GCATACGATT	13440
TTTAACCAAA	CCGTTATAGC	TAACAATCAC	AAAATAACA	ATAAGAGCGA	TAACTCCAAG	13500
AATAATCCAA	GTCATAATAT	AAGTCCTTTC	TGCTTTAGA	TTAGTACCA	TATATCAAAT	13560
TTTCTATGAT	TGTGGAAAAA	TAAGATGATA	CTAAAGAAGG	AAATAACTAT	GAAACCAAAA	13620
ACATTTTACA	ACTTGCTTGC	CGAGCAGAAT	CTTCCACTT	CGGACCAGCA	AAAAGAACAA	13680
TTTGACGTT	ATTTTGAGCT	CTTGGTCGAG	TGGAATGAGA	AGATTAATT	GACGGCGATT	13740
ACGGACAAGG	AAGAAGTTA	TCTCAAACAT	TTTACGATT	CGATTGCACC	CATTCTCAA	13800
GGTTTGATTC	CCAATGAAAC	TATCAAACCT	CTTGATATCG	GGGCTGGGC	AGGATTTCC	13860
AGTCTACCAA	TGAAAATTCT	CTATCCGGAG	TTAGATGTGA	CCATTATTGA	TTCACTCAAT	13920
AAGCGCATCA	ACTTCTTACA	ACTCTGGCT	CAAGAACTGG	ATTGAAACGG	AGTCATTTC	13980
TACCACGGAC	GTGCCGAAGA	TTTGCCCAA	GACAAGAACT	TCCGTGCTCA	ATATGATT	14040
GTAACAGCTC	GTGCGGTTGC	CCGTATGCAG	GTCCTATCTG	AATTGACTAT	TCCCTACCTT	14100
AAGGTTGGTG	GCAAACATT	AGCACTCAAG	GCTAGCAATG	CGCCTGAGGA	ATTATTAGAA	14160
GCTAAGAATG	CCCTCAATCT	CCTTTTTAGT	AAGGTCGAAG	ACAATCTCAG	TACGCCCTAC	14220
CGAATAGAGA	TCCGCGCTAT	ATCACAGTGG	TAGAAAAGAA	AAAAGAAACA	CCAAATAAAT	14280
ATCCACGTAA	GGCTGGTATG	CCAAATAAAC	GCCCACTTA	AATTGTTTAG	TAAACAAATG	14340
TTTACAAAAT	CAGCCTCGCT	CTTTTATTTC	TAGGCTCGGG	AAAAAATGAT	TTACAAAATC	14400
AGCCTCGCTC	TTTTATTCT	AGGCTCGGGA	AAAAAATGATT	TACAAAATCA	TTTTTTCTG	14460

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CTATACTATC CTAAGCAAAG GTTTTTAATG TCATCCCGTG AGGTGACGAA GACGCAGAAA	14520
TATTTAAAAC TCTTTAAAAT CTAATTTA AAGAAGTCTT ACTCTGAGGG CCTATTGCTG	14580
TAAAATAATG GGCTCTTTTG TGATGCCAA AAGTGAGGTT TATATGAAAC AAGAATCAAC	14640
TGTTGATTG TTAC	14654

(2) INFORMATION FOR SEQ ID NO: 107:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6405 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:

AGAAAAAATCT GCTTTACAGA AAATAAAAAT AATAGGAGAA AATCTATGTC AGATTGAAA	60
AAATACGAAG GTGTCATTCC AGCCTCTAC GCATGTTATG ATGATCAAGG AGAAGTAAGC	120
CCAGAACGTA CGCGTGCCTT GGTTCAATAC TTCATTGATA AAGGTGTTCA AGGTCTTTAT	180
GTCAATGGTT CTTCTGGTGA ATGTATCTAC CAAAGCGTTG AAGATCGAA CTTGATTTTG	240
GAAGAAGTCA TGGCGGTAGC AAAGGTAAT TGACCATTAT TGCCCATGTT GCTTGCAATA	300
ATACTAAAGA TAGTATGGAA CTTGCTCGCC ATGCTGAAAG CTTGGGAGTA GATGCTATTG	360
CAACGATTCC ACCAATTAT TTCCGCTTGC CAGAATACTC AGTTGCCAAA TACTGGAACG	420
ATATCAGTTC TGCAGCTCCA AACACAGACT ACGTGATTCA CAACATTCCCT CAATTGGCAG	480
GGGTTGCTTT GACTCCAAGC CTTTACACAG AAATGTTGAA AAATCCTCGT GTTATCGGTG	540
TGAAGAACTC TTCTATGCCA GTTCAAGATA TCCAAACCTT TGTCAGCCTT GGTGGAGAAG	600
ACCATATCGT CTTTAATGGT CCTGATGAGC AGTTCCCTAGG AGGACGCCCTC ATGGGGGCTA	660
GGGCTGGTAT CGGTGGTACT TATGGTGCTA TGCCAGAACT CTTCTTGAAA CTCAATCAGT	720
TGATTGCGGA TAAGGACCTA GAAACAGCGC GTGAATTGCA GTATGCTATC AACGCAATCA	780
TTGGTAAACT CACTTCTGCT CATGGAAATA TGTACGGTGT CATCAAAGAA GTCTTGAAAA	840
TCAATGAAGG CTTGAATATT GGATCTGTC GTTCACCATT GACACCAGTG ACTGAAGAAG	900
ATCGTCCAGT TGTAGAAGCG GCTGCTGCCT TGATTCGTGA AACCAAGGAG CGCTTCCTCT	960
AATCTAAAAG GAGGTATTTA TGACATATTA CGTTGCAATT GATATCGGTG GAACCAACAT	1020
CAAGTATGGT TTGGTTGATC AAGAGGGGCA ACTTCTTGAA TCGCATGAAA TGCCAACTGA	1080
GGCGCATAAG GGTGGACCTC ATATCTTACA AAAGACCAAA GATATCGTAG CTAGTTATTT	1140
AGAAAAAGGC CCAGTAGCAG GTGTTGCCAT ATCTTCTGCT GGGATGGTGG ATCCGGATAA	1200

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GGGTGAGATT TTCTATGCTG GGCGCAAAT CCCTAACTAC GCAGGCACCC AGTTCAAAAA	1260
GGAAATCGAA GAAAGCTTTA CTATTCCTTG TGAGATTGAA AATGATGTCA ACTGTGCAGG	1320
TCTTGCTGAG GCAGTATCTG GTTCAGGCAA GGGAGCAAGT GTGACACTTT GCTTGACCAT	1380
TGGAACCGGT ATCGGTGGTT GCTTGATTAT GGATAGGAAA GTCTTCCATG GTTTTAGCAA	1440
TTCAGCCTGT GAAGTCGGGT ATATGCATAT GCAGGATGGA GCTTTCAAG ACTTGGCTTC	1500
TACAACAGCT TTAGTGAAT ATGTAGCTGA AGCCCATGGA GAAGATGTTG ATCAGTGGAA	1560
TGGCCGTAGA ATTTTCAAAG AAGCCACTGA AGGAAACAAA ATCTGCATGG AAGGTATTGA	1620
CCGTATGGTT GACTATCTAG GAAAAGGTCT GGCAAATATT TGCTACGTTG CCAATCCAGA	1680
AGTGGTTATT CTTGGTGGTG GTATCATGGG GCAAGAGGCT ATCCTCAAAC CTAAGATCCG	1740
TACAGCCTTG AAAGAGGCTT TGGTACCAAG TTTAGCAGAA AAAACACGG TAGAATTGCG	1800
CCATCACCAA AATACAGCAG GGATGTTGGG TGCATATTAT CATTAAAGA CAAACAAATC	1860
CTAGTTTGGC TCAGCCAAAC TAGGATTTTC TTACACGTTT TTGTCTACGA TAGCCGTTGA	1920
GTTTTTATT TTCCCAGTAG CTATTAAGA TTTTTCCCT TGCTACGCGA TTGATTCCA	1980
AAAAGTAGGC ATAAATCAA TCGATAAAGA AGAGCATAGG AAGTTGAGCG GATATTGTT	2040
GGATATAGGA GGGTTGGCTG TGGGTGGCTA CAAGAACAGT CTCTGTATAG GTCTGGCTAT	2100
CTTTATTGGG AACACTTGTA AAGAGTACAG TCTTGTCCCC CATCTCCTTA GCATCTAATA	2160
GACTATCTAA AATAGAAGGA GTTGAGCCTG AAAGTGAGAA GCCCAGTAAGT AGACAATTTC	2220
CATCCATGAT GCTGGTTGTC CAGGCAAAGC CGTCTGGTC TGTCAGACT TCGCAGACCA	2280
CACCTAGTCG CATAAAACGT AATTTCATTT CACGGGCGAC GAGGCCAGAA CTCCCTGTT	2340
CAAAGAAGTA GATACGCTCA GCATCTCGA TTAGCTGGC AATTCTGTTCT AGTTGGATTT	2400
CGTCAATCAA GTCTTGTGTT TGTTCCCTCA TATTGCTATA ACTTCTGAGG ACTCGTTGG	2460
TCAGTGGACT GTGCTTGGAG ACTTGGTTGG CTTGATTTTC TGCCTGATGT TGGTATTGGA	2520
AAATAAATTC TCGGTAGCCA GTAAAGCCAC ACTTTTAGC AAAGCGGGTC AAAGCAGCTT	2580
GAGAAATATG TAATTTTGG GTGACTTGTT GAGAAGATAA ATCATCTGTA ATCGTTTCAG	2640
CTTGCAAAAA ATAGCGAGCG ATTTCTTGTT CTAGGTCTGT CATTCTCTCA AAATGTGAAT	2700
CAATGATAGT TGCGATATCT GGTTTGTCCA TAGGGAAAGC TCCTTACAT GAGTCATACT	2760
GGAAGACTAG ATCAGAGAAT AGTCACACTT CATTATAACA CATAATATAA GGATAGATAA	2820
ATAAAAACGC ATCTCTGTT TAAAAACGAA AAAATCGAAA AAGCTTCTCT CTTTCCATA	2880
ATTTTCTACT CAAATTGTGG TACAATTAAG AGTAAGATTT TAAGTTAGAA ATGAGACTGA	2940

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TTTGTATGAG	AAAATTTAAC	AGCCATTGCA	TTCCGATTG	GCTTAATTG	TTGTTTCAA	3000
TCGTCATTG	ACTCTTTATG	ACCATTATTG	GTCGTTGTT	GTATATGCAG	GTGTTGAACA	3060
AGGATTTTA	CGAAAAAAAG	CTAGCTTCAG	CTAGTCAGAC	CAAGATTACA	AGCAGTTCAG	3120
CCCGTGGGA	AATTATGAT	GCTAGTGGAA	AACCTTGGT	AGAAAATACG	TTAAAGCAGG	3180
TTGTTTCCCT	TACCGTAGC	AATAAAATGA	CGGCTACAGA	CTTAAAAGAA	ACAGCTAAA	3240
AGTTACTGAC	TTATGTGAGC	ATCAGTTCTC	CAAATTGAC	AGAACGCCAG	CTGGCGGATT	3300
ACTATTTGGC	TGATCCTGAA	ATCTATAAAA	AAATAGTGGA	AGCTCTCCCA	AGTGAGAAC	3360
GCTTGGATTC	AGATGGCAAT	CGTCTATCCG	AATCAGAACT	GTATAACAAT	GCGGTCGATA	3420
GTGTACAAC	GAGTCAACTA	AACTATACAG	AGGATGAAA	GAAAGAAATC	TATCTTTTA	3480
GTCAGTTAAA	TGCTGTTGGA	AACTTTGCGA	CAGGAACCAT	TGCGACAGAT	CCTCTAAATG	3540
ATTCTCAGGT	GGCTGTTATT	GCCTCTATTT	CAAAGGAGAT	GCCTGGCATT	AGTATTCTA	3600
CTTCTTGGGA	TAGAAAGGTT	TTGGAAACTT	CCCTTCTTC	TATAGTTGGG	AGTGTATCCA	3660
GTGAAAAGC	TGGTCTCCCA	GCGGAAGAAG	CAGAAGCCTA	TCTTAAAAAA	GGCTATTCTC	3720
TAAATGACCG	TGTAGGAACC	TCCTATTTGG	AAAAGCAATA	TGAAGAGACC	TTACAAGGA	3780
AACGCTCGGT	AAAAGAAATC	CATCTGGATA	AATATGGCAA	TATGGAAAGC	GTGGATACAA	3840
TTGAGGAAGG	TAGTAAGGGA	AACAATATCA	AACTGACCAT	TGATTGGCT	TTCCAAGATA	3900
GCGTGGATGC	TTTACTGAA	AGTTATTC	ATTCTGAGCT	AGAAAATGGT	GGAGCCAAGT	3960
ATTCTGAAGG	TGTCTATGCA	GTCGCCCTTA	ACCCAAAAAC	AGGTGCGGTT	TTGTCTATGT	4020
CAGGGATTAA	ACATGACTTG	AAAACGGGAG	AGTTGACGCC	TGATTCTTG	GGAACGGTAA	4080
CCAATGTCTT	TGTTCCAGGT	TCGGTTGTCA	AGGCGGCGAC	CATCAGCTCA	GGTTGGGAAA	4140
ATGGAGTCTT	GTCAGGAAAC	CAGACCTTGA	CAGACCAGTC	CATTGTCTTC	CAAGGTTCA	4200
CTCCCATCAA	TTCTGGTAT	ACTCAGGCTT	ACGGTTCAATT	CCCTATCACA	GCGGTCCAAG	4260
CTCTGGAGTA	TTCATCAAAT	ACCTATATGG	TCCAAACAGC	CTTAGGTCTT	ATGGGGCAA	4320
CCTATCAACC	CAATATGTTT	GTCGGCACCA	GCAATCTAGA	GTCTGCTATG	GAGAAACTGC	4380
GTTCAACCTT	TGGCGAATAT	GGCTTGGGTA	CTGCGACAGG	AATTGACCTA	CCAGATGAAT	4440
CTACTGGATT	TGTTCCAAA	GAGTATAGCT	TTGCTAATTA	CATTACTAAT	GCCTTTGGGC	4500
AGTTTGATAA	CTATACGCCG	ATGCAGTTGG	CTCAGTATGT	AGCAACTATT	GCAAATAATG	4560
GTGTTCGTGT	GGCTCCTCGT	ATTGTTGAAG	GCATTATGG	TAATAATGAT	AAGGGAGGAC	4620
TGGGTGACTT	GATTCAGCAA	CTGCAACCGA	CAGAGATGAA	TAAGGTCAAT	ATATCCGACT	4680
CCGATATGAG	CATCTTGCAC	CAAGGTTTTT	ATCAGGTTGC	CCATGGTACT	AGTGGATTGA	4740

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CAACTGGACG	TGCCTTTCA	AATGGTGCCT	TGGTATCCAT	TAGCGAAAAA	ACAGGTACAG	4800
CCGAAAGCTA	TGTGGCAGAT	GGTCAGCAAG	CAACCAATAC	CAATGCGGTG	GCCTATGCC	4860
CATCTGATAA	TCCCCAAATC	GCTGTCGAG	TGGTCTTCC	TCATAATACC	AATCTAACAA	4920
ATGGTGTAGG	ACCTTCCATT	GCGCGTGACA	TTATCAATCT	GTATCAAAAAA	TACCATCCAA	4980
TGAATTAGAA	AGGAATTAT	GCTTTATCCA	ACACCTATTG	CCAAGTTGAT	TGACAGTTAT	5040
TCTAAGTTAC	CAGGTATCGG	GATTAAGACG	CCTACGCGTC	TGGCCTTTA	TACGATTGGG	5100
ATGTCTGCTG	ATGATGTCAA	TGAATTGCA	AAAAATCTCC	TTTCTGCTAA	GAGAGAATTG	5160
ACATATTGTT	CTATTTGAG	ACGTTTGACA	GACGACGATC	CTTGTCTAT	CTGTACTGAT	5220
CCGACTCGTG	ACCAGACAAC	AATTTAGTT	CTTGAGGATA	GTAGAGATGT	GGCAGCCATG	5280
GAAAATATCC	AAGAATACCA	TGGACTCTAT	CATGTCCTTC	ATGGCCTCAT	TTCTCCTATG	5340
AATGGTATCA	GTCCGGACGA	TATCAATCTC	AAGAGCCTTA	TGACTCGTCT	TATGGATAGT	5400
GAGGTTTCAG	AAGTGATTGT	GGCGACTAAT	GCTACAGCGG	ATGGTGAAGC	GACTTCCATG	5460
TATCTTCAC	GTGGCTCAA	GCCGGCTGGT	ATCAAGGTTA	CGCGTCTAGC	ACGAGGTCTC	5520
GCTGTGGGAG	CGGACATTGA	GTATGCGGAC	GAAGTGACAC	TCTTACGAGC	CATTGAAAAT	5580
CGGACAGAGT	TGTAAGTGT	GGCAAATTAA	CGAACTCCAT	TCATTTATAA	AAAATCAAAG	5640
AGGCTGAAA	TCGTTCTAT	CGGCCTCTTT	TTGTATAGTG	TGATGAGTAG	GCTCAGGTTC	5700
AAGTTTAAA	AAACCAAGCA	AATATGATAT	ACTAAAGAGC	GAGTATTCTA	GTAGAATTAG	5760
GACAAATAAT	ATGAAACAAA	CGATTATTCT	TTTATATGGT	GGACGGAGTG	CGGAACGCGA	5820
AGTCTCTGTC	CTTTCAGCTG	AGAGTGTAT	CGGTGCGGTG	GATTACGACC	GTTCACAGT	5880
CAAGACTTTC	TTTATCAGTC	AGTCAGGTGA	CTTTATCAA	ACACAGGAAT	TTAGTCATGC	5940
TCCGGGGCAA	GAAGACCGTC	TCATGACCAA	TGAAACCATT	GATTGGGATA	AGAAAGTTGC	6000
ACCAAGTGCT	ATCTACGAAG	AAGGTGCAGT	GGTCTTCCA	GTCCTTCACG	GGCCAATGGG	6060
AGAAGATGGC	TCTGTTCAAG	GATTCTTGG	AGTTTGAAA	ATGCCTTACG	TTGGTTGCAA	6120
CATTTGTCA	TCAAGTCTT	CCATGGATAA	AATCACGACT	AAGCGTGTTC	TGGAATCTGC	6180
TGGTATTGCC	CAAGTCCCTT	ATGTGGCTAT	CGTTGAAGGC	GATGATGTGA	CTGCTAAAAT	6240
CGCTGAAGTG	GAAGAAAAAT	TGGCTTATCC	AGTCTTCACT	AAGCCGTCAA	ACATGGGGTC	6300
TAGTGTGGT	ATTTCTAAGT	CTGAAAACCA	AGAAGAACTC	CGTCAAGCCT	TAAAACATTGC	6360
CTTCCGATAT	GACAGCCGTG	TCTTGGTTGA	GCAAGGAGTG	AATGC		6405

(2) INFORMATION FOR SEQ ID NO: 108:

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(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 108:

CGAGCTCGGG TACCGGGATT TTAAGGAGTT TGATATGTAT AACCTATTAT TAACCATT	60
ATTAGTATTA TCTGTTGTGA TTGTGATTGC AATTTCATG CAACCAACCA AAAACCAATC	120
CAGCAATGTA TTTGATGCCA GTTCAGGTGA TTTGTTGAA CGCAGTAAAG CTCGCGTT	180
TGAAGCTGTA ATGCACCGTT TGACAGGGAT TTTAGTCTTT TTCTGGCTAG CCATTGCCT	240
ACCATTGACG GTATTATCAA GTAGATAAGA AAATAATGGG CAGGACTAGG TCTTGCCTC	300
TTTTTATTGT TAAAGGATGT TTGAGAAGGT TTTACAGTAA AAGAAAATTA AAAAATCTAG	360
AAAGAAAATA TGAAAGATAG AATAAAAGAA TATTTACAAG ACAAGGGAAA GGTGACTGTT	420
AATGATTGGG CTCAGGCTTT GGGAAAAGAC AGTTCCAAGG ATTTTCGTGA GTTGATTAAA	480
ACCTTGTCCCT TAATGGAAAG AAAGCACCAA ATTCTGTTTG AAGAAGATGG TAGTCTGACA	540
TTAGAAAATTA AGAAAAAACAA TGAGATTACC CTCAAGGGGA TTTTTCATGC CCATAAAAAT	600
GGCTTTGGCT TTGTTAGTCT GGAAGGCGAG GAGGACGACC TTTTTGTAGG GAAAATGAT	660
GTCAACTATG CTATTGATGG TGATACCGTC GAGGTAGTGA TTAAGAAAGT CGCTGACCGC	720
AATAAGGGAA CAGCAGCAGA AGCCAAAATT ATTGATATCC TAGAACACAG TTTGACAACA	780
GTTGTCGGGC AAATCGTTCT GGATCAGGAA AAACCTAAGT ATGCTGGCTA TATTGTTCA	840
AAAATCAGA AAATCAGTCA ACCGATTAT GTTAAGAAC CAGCCCTAAA ATTAGAAGGA	900
ACAGAAGTTC TCAAAGTCTT TATCGATAAA TACCCAAGCA AGAAACATGA TTTCTTGTC	960
CGCAGTGTTC TCGATGTAGT GGGACACTCA ACGGATGTGC GAATTGATGT TCTTGAGGTC	1020
TTGGAATCAA TGGACATTGT ATCCGAGTTT CCAGAAGCTG TTGTTAAGGA AGCAGAAAGT	1080
GTCGCTGATG CTCCGCTCTCA AAAGGATATG GAAGGTCGTC TGGATCTAAG AGATGAAATT	1140
ACCTTTACCA TTGACGGTGC GGATGCCAAG GACTTGGACCG ATGCAGTGCA TATCAAGGCT	1200
CTGAAAATG GCAATCTGGA GTTGGGGTT CACATCGCAG ATGTTCTTA TTATGTGACC	1260
GAGGGGTCTG CCCTGACAA GGAAGCCCTT AACCGTGCAG CTTCTGTTA CGTGACAGAC	1320
CGAGTGGTGC CAATGCTTCC AGAACGACTA TCAAATGGCA TCTGCTCTCT CAATCCCCAA	1380
GTTGACCGCC TGACCCAGTC TGCTATTATG GAGATTGATA AACATGGTCG TGTGGTCAAC	1440
TATACCATTA CACAAACAGT TATCAAGACC AGTTTCGTA TGACCTATAG CGATGTCAAT	1500

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GATATCCTAG	CTGGCGATGA	AGAAAAGAGA	AAAGAATATC	ATAAAATTGT	ATCAAGTATC	1560
GAACTCATGG	CCAAGCTTCA	TGAAACTTTA	GAAAACATGC	GTGTGAAACG	TGGAGCTCTC	1620
AATTTGATA	CCAATGAAGC	GAAGATTTA	GTGGATAAAC	AAGGTAAGCC	TGTTGATATC	1680
GTTCTTCGGC	AGCGTGGTAT	TGCCGAGCGG	ATGATTGAGT	CTTTTATGTT	GATGGCTAAT	1740
GAAACAGTTG	CCGAACATTT	CAGCAAGTTG	GATTTGCCTT	TTATCTATCG	AATTCAACGAG	1800
GAGCCTAAGG	CTGAAAAGGT	TCAGAAGTTT	ATTGATTATG	CTTCGAGTTT	TGGCTTGC	1860
ATTTATGGAA	CTGCCAGTGA	GATTAGTCAG	GAGGCACCTTC	AAGACATCAT	GCGTGCTGTT	1920
GAGGGAGAAC	CTTATGCAGA	TGTATTGTCC	ATGATGCTTC	TCGCTCTAT	GCAGCAGGCT	1980
CGTTATTTCGG	AGCACAAATCA	CGGCCACTAT	GGACTAGCTG	CTGACTATTA	TACTCACTTT	2040
ACCAGTCAA	TTCGTCGTTA	TCCAGACCTT	CTTGTTCAACC	GTATGATTG	GGATTACGGC	2100
CGTTCTAAGG	AAATAGCAGA	GCATTTGAA	CAACTGATTTC	CAGAGATTG	GACCCAGTCT	2160
TCCAACCGTG	AACGTCGTGC	CATAGAAGCT	GAGCGTGAAG	TCGAAGCCAT	GAAAAAGGCT	2220
GAGTATATGG	AAGAATACGT	GGGTGAAGAG	TATGATGCAG	TTGTATCAAG	TATTGTCAAA	2280
TTCCGGTCTCT	TTGTCGAATT	GCCAAACACA	GTTGAAGGCT	TGATTCACAT	CACTAATCTG	2340
CCTGAATTTC	ATCATTCAA	TGAGCGTGAT	TTGACTCTTC	GTGGAGAAAA	ATCAGGTATC	2400
ACTTTCCGAG	TGGGTCAAGCA	GATCCGTATC	CGTGTGAAA	GAGCGGATAA	AATGACTGGA	2460
GAGATTGATT	TTTCATTCTG	ACCTAGTGAG	TTTGATGTGA	TTGAAAAAAGG	CTTGAAACAG	2520
TCTAGTCGTA	GTGGCAGAGG	GCGTGATTCA	AATCGTCGTT	CGGATAAGAA	GGAAGACAAG	2580
AGAAAATCAG	GACGCTAAA	TGATAAGCGT	AAGCATTAC	AAAAAGACAA	GAAGAAAAAA	2640
GGAAAGAAAC	CTTTTTACAA	GGAAGTAGCT	AAGAAAGGAG	CCAAGCATGG	CAAAGGGCGA	2700
GGGAAAGGTC	GTCGCACAAA	ATAAAAGGC	ACGCCACGAC	TATACAATCG	TAGATACGCT	2760
AGAGGCAGGG	ATGGTCTCTGA	CTGGAACTGA	AATCAAGAGT	GTACGAGCTG	CTCGAATTAA	2820
TCTCAAGGAT	GGCTTGCTC	AAGTAAAAAA	TGGAGAAGTT	TGGCTGAGCA	ATGTTCATAT	2880
CGCGCCTTAC	GAAGAGGGCA	ATATCTGGAA	CCAGGAACCA	GAACGTGTC	GTAAACTCCT	2940
GCTCCATAAA	AAGCAAATTC	AAAAATTGGA	ACAAGAGATC	AAAGGGACAG	GAATGACCTT	3000
AGTTCCCCCTT	AAGGTCTATA	AAAAAGATGG	CTACGCTAAG	CTTCTTTAG	GACTTGCCAA	3060
AGGGAAGCAT	GACTATGACA	AACGGGAGTC	TATCAAACGT	CGTGAGAAA	ATCGAGATAT	3120
CGCGCGTGTG	ATGAAAGCTG	TTAACAGCG	ATAAAAAGAG	GAATTGAAAA	TGGAAAATT	3180
AGTTGCCTAT	AAACGCATGC	CTTTGTGGAA	TAAACAAACA	ATGCCTGAAG	CTGTTCAGCA	3240

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AAAGCACAAT	ACAAAAGTTG	GGACTTGGGG	GAAAATTACT	GTCTTGAAGG	GAGCTCTCAA	3300
GTTTATTGAA	TTGACAGAAG	AAGGGGAAGT	TCTAGCTGAA	CACCTCTTGT	AAGCAGGGC	3360
AGACAATCCA	ATGGCCCAAC	CTCAAGCCTG	GCACCGAGTG	GAAGCTGCCA	CAGATGATGT	3420
GGAATGGTAC	TTGGAATTTC	ATTGTAACCC	TGAGGATTAT	TTTGCTAAAA	AATACAATAC	3480
CAATCCTGTT	CATTCAGAGG	TCCTAGAGGC	CATGCAGACA	GTGAAACAAG	GGAAAGCTTT	3540
GGATTTGGGT	TGTGGTCAGG	GGCGTAATTC	TCTTTTCTA	GCCCAGCAAG	ATTTTGATGT	3600
GACGGCTGTA	GATCAAAATG	GACTAGCTCT	TGAAATCTTG	CAAAGCATTG	TGGAGCAGGA	3660
AGATTGGAC	ATGCCTGTTG	GCCTTACGA	TATCAATTCA	GCTAGCATTG	AACAAGAATA	3720
TGATTTTATC	GTTCACACAG	TTGTTCTCAT	GTTCCTACAA	GCGGACCGCA	TTCCAGCTAT	3780
TATTCAAAAT	ATGCAGGAGA	AAACCAAGTGT	TGGTGGTTAC	AACCTTATCG	TTTGTGCCAT	3840
GGACACGGAG	GATTATCCTT	GCTCGGTTAA	CTTCCCATTG	ACCTTTAAAG	AAGGAGAACT	3900
GGCAGACTAT	TACAAGGATT	GGGAATTGGT	TAAGTACAAT	GAAAATCCAG	GCCATTTGCA	3960
CCGTCGCGAT	GAGAATGGCA	ATCGTATTCA	ACTACGCTTT	GCGACCTTAC	TAGCTAAGAA	4020
AATCAAGTAA	ACACACATGA	AGATTAGGAA	TTTTCTGTAT	CTTTTTCTT	TTTTACGAAT	4080
GATATAGAAA	AGGAGGGAAT	TCATGTTGT	TGCGAGAGAT	GCTAGGGAG	AATTGGTAAA	4140
TGTGTTAGAG	GATAAACTTG	AGAACAGAAGC	ATACACCTGC	CCAGCTGTG	GAGGCCAGCT	4200
CCATTTGCGT	CAAGGACCAA	GTGTACGGAC	GCATTTGCC	CATAAATCCT	AAAAAGACTG	4260
TGATTTTTTC	TTTGAAAATG	AAAGTCCAGA	ACACCTGGCC	AATAAGGAAT	CCCTCTATCA	4320
CTGGTTGAAA	AAAGAGACAA	AGGTTCAATT	AGAGTACCCG	CTTTCAGAAC	TTAAACAGAT	4380
TGCGGATGTA	TTTGAAATG	GCAATCTAGC	TCTAGAAGTT	CAGTGTAGTC	CCTTGCCTCA	4440
GAAAGTCCTT	AAAGAGCGAA	GTGAGGGCTA	TCGTAGTCAG	GGTTACCAAG	TACTGTGGTT	4500
GCTGGGTCAA	AAACTGTGGC	TCAAGGAGCG	TTTGACTCGT	CTACAGCAAG	GTTTCTTTA	4560
TTTCAGTCAA	AACATGGGCT	TTTATGTTTG	GGAATTAGAC	AAGGAAAAAC	AAGTTTTAAG	4620
ACTCAAATAC	CTGATTTACC	AGGATCTCCG	CGGTAAACTC	CATTATCAA	TCAAGGAATT	4680
TTCCTATGGT	CAAGGTAGTT	TATTGGAAAT	ATTGCGTCTT	CCCTATAAGA	GACAAAAAAAT	4740
ATCTCATTTC	ACAGTTCTG	AGGACAAGGA	CATCTGTCGC	TATATCCGGC	AACAACCTTA	4800
TTATCAAAT	CTCTTTGGA	TGAAAGAAC	AGCAGAAGCC	TATCAAAGG	GAGAAAATAT	4860
CCTGACTTAT	GGACTGAAAG	AATGGTATCC	ACAAATTGCA	CCAATAGTGG	GCAAATTTT	4920
CCAGATTGAA	CAAGACTTGA	CTAGCTATTA	TCAGCACTTT	TATACCTATT	ACCAAAAAAA	4980
TCCTCAAAT	GATTGGAAA	AGCTTTATCC	ACCAGCCTTT	TATCAGCAAT	ATTTCTTGAA	5040

AAATATGGTA	GAATAGAAAG	GATGGAGGAA	TCTAATGGTA	TTACAAAGAA	ATGAAATAAA	5100
TGAAAAAGAT	ACATGGGATC	TATCAACGAT	CTACCCAACT	GACCAGGCTT	GGGAAGAAGC	5160
CTTAAAAGAT	TTAACAGAAC	AATTGGAGAC	AGTAGCCAG	TATGAAGGCC	ATCTCTTGGA	5220
TAGTGCGGAT	AACCTACTAG	AAATCACTGA	ATTTTCTCTT	GAAATGGAAC	GCCAGATAGA	5280
GAAGCTTTAC	GCTTATGCTC	ATATGAAGAA	TGACCAGGAT	ACACGTGAAG	CTAAGTATCA	5340
AGAGTACTAT	GCCAAGGCCA	TGACACTCTA	CAGCCAGTTA	GACCAAGCCT	TTTCATTCTA	5400
TGAGCCTGAA	TTTATGGAGA	TTAGCGAAAA	GCAGTATGCT	GACTTTTAG	AAGCTCAACC	5460
AAAGCTGCAG	GTTCATCAAC	ACTATTTGA	CAAGCTTTG	CAAGGCAAGG	ATCACGTTCT	5520
TTCACAACGT	GAAGAAGAAT	TATTGGCTGG	AGCTGGAGAA	ATCTTGGTT	CAGCAAGTGA	5580
AACCTTCGCT	ATCTTGGACA	ATGCGGATAT	TGTGTCCTC	TATGTCCTAG	ACGATGATGG	5640
TAAAGAACGT	CAGCTATCTC	ATGGGACTTA	CACACGTTG	ATGGAGTCTA	AAAACGTGA	5700
GGTTCGCCGT	GGTGCCCTATC	AAGCTCTTA	TGCGACTTAC	GAACAATTCC	AACACACCTA	5760
TGCCAAAACC	TTGCAAACCA	ATGTTAAGGT	GCAAAATTAC	CGTGCTAAAG	TCGTAACTA	5820
CAAGAGTGCT	CGTCATGCAG	CCCTCGCAGC	GAATTTGTT	CCAGAAAGTG	TTTATGACAA	5880
TTTGGTAGCA	GCAGTTCGCA	AGCATTGCC	ACTCTTACAT	CGCTATCTG	AGCTTCGTT	5940
AAAAATCTTG	GGGATTCAG	ATCTCAAGAT	GTACGATGTC	TACACACCGC	TTTCATCTGT	6000
TGAATACAGT	TTTACCTACC	AAGAAGCCTT	GAAAAAAAGCA	GAAGATGCTT	TGGCAGTCTT	6060
GGGTGAGGAT	TACTTGAGCC	GTGTTAACG	TGCCTTCAGC	GAGCGTTGGA	TTGATGTTTA	6120
CGAAAATCAA	GGCAAGCGTT	CAGGTGCCTA	CTCTGGTGGT	TCTTATGATA	CCAATGCCTT	6180
TATGCTTCTC	AACTGGCAAG	ACAATCTGGA	CAATCTCTTT	ACTCTGTTC	ATGAAACAGG	6240
TCACAGTATG	CATTCAAGCT	ATACTCGTGA	AACTCAGCCT	TATGTTACG	GGGATTACTC	6300
TATCTTTTG	GCTGAGATTG	CCTCAACTAC	CAATGAAAAT	ATCTTGACGG	AGAAATTATT	6360
GGAAGAAGTG	GAAGACGACG	CAACACGCTT	TGCTATTCTC	AATAACTTCC	TAGATGGTTT	6420
CCGTGGAACA	GTTCCTCGCC	AAACTCAATT	TGCTGAGTTT	GAACACGCCA	TTCACCAAGC	6480
AGATCAAAAT	GGGGAGGTCT	TGACAAGCGA	TTTCCTAAAT	AAACTCTACG	CAGACTTGAA	6540
CCAAGAGTAT	TATGGTTTGA	GTAAGGAAGA	CAATCCTGAA	ATCCAATACG	AGTGGGCTCG	6600
CATTCCACAC	TTCTACTATA	ACTACTATGT	ATATCAATAT	TCAACTGGCT	TTGGGGCCGC	6660
CTCAGCCTG	GCTGAAAAAA	TTGTCCATGG	TAGTCAAGAA	GACCGTGACC	GCTATATCGA	6720
CTACCTCAAG	GCAGGTAAGT	CGGACTATCC	ACTTAATGTC	ATGAGAAAAG	CTGGTGTGTA	6780

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TATGGAGAAG	GAAGACTACC	TCAACGATGC	CTTTGCAGTC	TTTGAACGCC	GTTTAAATGA	6840
GTTTGAAGCC	CTTGTGAAA	AATTAGGATT	GGCATAAAAT	GGTTGAATCG	TATAGTAAGA	6900
ATGCTAACCA	TAACATGCGT	CGTCCTGTCG	TCAAAGAAGA	AATTGTAGAC	TTGATGCGTC	6960
AGCGTCAAAA	GCAGGTCACA	GGTTCTTGA	AAGAATTGGA	AGACTTGC	CGCAAGGAAA	7020
ATATTCCAT	TATTCCCCAT	GAAACGGTTG	CTTATTTCCG	TTTCCTTATG	GAAACCATGC	7080
AGCCTAAAAA	TATTCTGGAA	ATTGGGACGG	CTATCGTTT	TCAGCTCTC	TTGATGGCTG	7140
AACATGCGCC	AAATGCTAAG	ATTACAACTA	TTGATCGTAA	TCCAGAAATG	ATTGGTTTG	7200
CCAAGGAAAA	TTTTGCCAG	TTTGACAGTC	GCAAGCAAAT	CACTCCCTA	GAGGGAGATG	7260
CGGTGGATGT	CTTATCTACA	CTGACAGAGT	CTTATGATTT	CGTCTTATG	GATTCTGCCA	7320
AGTCTAAATA	CATCGTCTT	CTGCCAGAAA	TCCTCAAACA	TTTGGAAAGTT	GGTGGTGTGG	7380
TTGTCTTGG	TGATATTTTT	CAAGGTGGTG	ATGTTGCCAA	GGATATTATG	GAAGTCCGTC	7440
GTGGTCAGCG	AACCATTAT	CGAGGCCTTC	AAAAATTATT	TGATGCAACC	TTAGACAATC	7500
CAGAACTCAC	CGCAACATTA	GTGCCCTTAG	GAGATGGTAT	TCTCATGCTT	CGTAAAAATG	7560
TAGCAGATGT	TCAACTGTCT	GAAAGCGAAT	GATTTTCAGA	AAAATTAAAG	AAAAAATAGT	7620
AAAATAGATA	GAGTAACACT	TATCTCAAAG	GAGTAGACAT	GAAGAAAAAA	TTATTGGCAG	7680
GTGCCATCAC	ACTATTATCA	GTAGCAACTT	TAGCAGCTTG	TTCGAAAGGG	TCAGAAGGTG	7740
CAGACCTTAT	CAGCATGAAA	GGGGATGTCA	TTACAGAACAA	TCAATTAT	GAGCAAGTGA	7800
AAAGCAACCC	TTCAGCCAA	CAAGTCTTGT	TAAATATGAC	CATCCAAAAA	GTTTTGAAA	7860
AAACAATATGG	CTCAGAGCTT	GATGATAAAG	AGGTTGATGA	TACTATTGCC	GAAGAAAAAA	7920
AAACAATATGG	CGAAAACACTAC	CAACGTGTCT	TGTCACAAGC	AGGTATGACT	CTTGAAACAC	7980
GTAAAGCTCA	AATTCTACA	AGTAAATTAG	TTGAGTTGGC	AGTTAAGAAG	GTAGCAGAAG	8040
CTGAATTGAC	AGATGAAGCC	TATAAGAACAG	CCTTGATGA	GTACACTCCA	GATGTAACGG	8100
CTCAAATCAT	CCGTCTTAAT	AATGAAGATA	AGGCCAAAGA	AGTTCTCGAA	AAAGCCAAGG	8160
CAGAAGGTGC	TGATTTGCT	CAATTAGCCA	AAGATAATTC	AACTGATGAA	AAAACAAAAG	8220
AAAATGGTGG	AGAAATTACC	TTTGATTCTG	CTTCAACAGA	AGTACCTGAG	CAAGTCAAAAA	8280
AAGCCGCTT	CGCTTAGAT	GTGGATGGTG	TTTCTGATGT	GATTACAGCA	ACTGGCACAC	8340
AAGCCTACAG	TAGCCAATAT	TACATTGTA	AACTCACTAA	GAAAACAGAA	AAATCATCTA	8400
ATATTGATGA	CTACAAAGAA	AAATTAAAAAA	CTGTTATCTT	GAATCAAAAA	CAAATGATT	8460
CAACATTGT	TCAAAGCATT	ATCGGAAAAG	AATTGCAAGC	AGCCAATATC	AAGGTTAAGG	8520
ACCAAGCCTT	CCAAAATATC	TTTACCCAAT	ATATCGGTGG	TGGAGATTCA	AGCTCAAGCA	8580

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GTAGTACATC	AAACGAATAG	TCCAAATCAA	TGAGTCAGGG	AAAAAACTCG	ACTTCAGGAA	8640
AAAATGAAGC	AAACATTCCC	ACAATAAAAC	GCATAGTACA	AGGTTTGTAC	TGCCCCCAA	8700
AAAGTTAGAC	AATTAATTAA	TCCGAAGGAT	TTAGTTCTGT	ATTGCACAGA	GCTAAGTCCT	8760
TTTAGTTTTA	TCTTAATTCT	CTTATTGTTG	TAATAATCAA	TATAGTCTAT	AATGGCTCGT	8820
TCCAATTGAT	TAAGTGTATT	AAATGTTTC	TCATAGCCAT	AAAACATTTC	GGATTTAAA	8880
ATGCCAAAGA	AAGATTCAT	CCTACCGTTG	TCTTGGCTGT	TGCCCTTACG	TGACATGGAT	8940
GCTTGAATTC	CCTTACTCTC	TAGGAAGCGA	TGATAAGAAT	CGTGTGATA	TTGCCAGCCT	9000
TGGTCACTAT	GGAGAATCGT	ATTCTCGTAG	TGCTTCTCTT	TGAATGCCG	TTCCAACATT	9060
AACGATCAAT	CAATTTAATC	ATGTACCTAA	GATTAGAATT	GTTTATCCCA	AATTATTTG	9120
AAAGCTTCTC	TAAGCTATAT	CCTGTGTTTC	TAAGTTCATA	GATCTGAAC	TTATCATCAT	9180
AAAGTTAAATT	CATAATAAAA	ACACCCAAA	AGTTAGATT	TTTCTGTCTA	ACTTTGGGG	9240
TGTAGTTCAT	GTACACCTGA	TATGATGCGT	TTTATAAATT	TAAAGACTTT	TTGACCAGCC	9300
TCATTTTTTT	AACTTGATAC	TCAGTGAAAA	GCAAAGATTA	AACTAGGAAG	CTAGCTGTAG	9360
GCTGCTCAAA	GAACAGCTTT	GAGGTTGTAG	ATAAAACTTG	TGAGGTCA	AACATATATA	9420
ATGTGAAGCT	GACGTGGTTT	GAATAGATT	TAGAAGAGTA	TGAGTCTGGA	AGTTTAATG	9480
GATAATGCAA	GATTCATAG	AATGGTAAG	CTAGAGTTCT	TATGTGAAGA	GTTTGGGCAT	9540
AAACTTTAC	CTTTCCCTCC	CTACTCATCT	TAGTATAGAA	AAAGTGAATCT	GAAATAGTAC	9600
ATAACTGCTT	CTAAAACATT	CTTATAAATT	GATTTAAATT	CTCAAATCAT	ATTATTCAGT	9660
TCTTATTTC	TTTTGTTCTA	CAATCCTGTT	GAGAAGACAC	GTGTTCATAT	CAAAAAGGTA	9720
TTGGCAAGTT	GCAATACCTT	TTTACGAGGC	TCTGTTGTCT	TATTTTGTT	TCAACTGACT	9780
ATATCTCCTA	TGGTTCTAGT	TCAGAAGGCT	AGGCTATAAT	TATGATTGAT	AAGAAGTATC	9840
ATTCCAAGTA	TTGGGAGTGA	ATGTTTCAAA	ATCATGGGTT	TCTATAATGG	TCAGGCTGGC	9900
ATTTGCTAGA	CCGCCATCTT	TACGAAGAAG	TGGTTCTTTA	TAGCCTAGGA	GAGTACGAAG	9960
ACTGGCAGTA	AGATTGGCGC	CGTGTCCGAC	AATTAGAATA	CGTTCA	GACTATCTTT	10020
TAATGATTTG	ATAAAATTGGA	TGGTCCGTTG	AGTTGTACTA	TAGAGGGATT	CGGCTCCGAA	10080
CATTGAGTG	TCAAATTGAG	CAAGATTGGA	ACGAAAAGCC	TGGATTGTT	CGGGGTAAAT	10140
AGCTTCCAAG	GTTGCAATT	TCAAACCTTC	TAACCTCCCA	AGTTGCCATT	CACGGAGATT	10200
AGGAACGATT	TCTAAAGAAC	AGGGGGTATA	GAGTTGACTT	TGGATAATCT	CAGCAGATT	10260
GACCGCTCGA	GGTAAATCAC	TTGAATAAAT	CTGATCAAAA	GGAATTTCCT	TGAGATACTG	10320

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ACCAAGTCGT	TTT	AGGGTTT	CAATGGATT	AGGAAGAAGA	GGAGAAC	CACTAGCACC	10380
TTGAAAACGA	CCT	CTTGGT	TCCAGAGGGT	ACGACCGTGG	CGGACAAAGT	AGAGTTTCAT	10440
TACTTGATGT	CCT	CCAAAAT	ATCTACAAAG	TCTGCCTTTA	CAAAGCTAGC	CAAGTCTTGT	10500
GGCGCGACGA	TAAT	GCTGTG	TCCGACTTCG	CCTGCAGAGA	CAATCATTG	ATCCAAATCT	10560
AGAGCAATTT	TATCGATAAA	AATGGGATAA	TTGTGTTCT	GACGAATTCC	GACAGGATTA		10620
TTGGCTCCAT	GAAT	GTAACC	AGTGTTTTT	TCTAAGTCCT	TTTGTGGAAT	CATGCTCACT	10680
TTTTTATTGC	CAGAAATT	TTT	AGCTAGTTTC	TTTCAGACA	AGTGCTGAGT	GATAGGGACA	10740
ATTCCGATAAA	TCGGTCCGGT	CTTGTCTCCC	AAAAGCGCCA	AGGTTTGAA	AATCTGATCT		10800
CGTTCTAAC	CTTGAGGAAG	CTTCCTTCT	AGGGCATTGA	TTTGAATCCC	CTGATGAGGG		10860
ATAGCTGCTT	TAGATAGGAT	TTGTTCCACC	AATGTTTTT	TGATTTAAC	TTTTTTGCC		10920
ATTATTTATA	TTTATCCTCC	AATTGACTCA	TCCAAATACC	AAGCCAGATT	CCCAGCGCAA		10980
AGAAGAAGGC	GATGATGACA	TAACCGACAA	GTGAAAGTCC	TGTGTATTGG	ATACTTCAG		11040
CGTTCTGC	ATTTGGAAATT	AAGATCAAAA	GGGTACTTGA	TAGGACGATA	CCGATGATGA		11100
AATGATAGAC	GAACGTGTTA	CGGAGTTCTT	CTAGTTCTCC	GTCCGTCCAA	GCGTAGGCCA		11160
CTTCTTCTTT	CTTGCCTTTA	CCTTGGACA	TCTGTAAAG	AGGTGGGAGG	GCAATATAGA		11220
CATGACCTGC	CTCGACTAGC	GGACGCATGT	AACGGTAGAA	AAATGTCAAG	AGCAAGGTCT		11280
GGATATGGGC	ACCGTCGGTA	TCCGCATCG					11309

(2) INFORMATION FOR SEQ ID NO: 109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 109:

CCATAGTC	ACAAGTCTT	GTAAAGGTTT	ATCCCTGATT	CATGTAAAGA	TTGTGTAAAG	60
AATCAAAAAA	AGCCACTTTT	GAAAAATGGC	TGCTCCTAAA	AATAGCTTTA	AAAATTATTA	120
GTCCTGTGCG	AAAGATTGGT	TAGGAAGAAA	AATCGTGAAG	CAACTGCCTC	TGCCAAGCTG	180
ACTCGTCACC	GTGACTGGC	CACCTAATAA	TTGACTGAGT	TCTTGACAA	TGGCAAGGCC	240
AAGACCAGTG	CCACCAAGTTT	GTCTGCTTCG	ACCTTTATTA	ACTCGTAA	AACGTTCAAA	300
AATAACGATCC	TGCTCTAATT	GACTAATACC	AATCCCTGTA	TCTGATACAG	AAATCTTAAT	360
GCCTTCGTC	ACCTTTGGG	TCTTGACCTC	AATTTTCCC	CCTTGTTCA	TGTAACGGAT	420

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GGCATTGGAT AAAAGATTGA	GTAAGATTTG	GGAAAGTAAT	TGACTATCTG	ATACGGAGGT	480	
GACATCATCT	GGCACCTGCA	CCTTTAGCTG	TAAATCCTTC	TTCTTGAGCT	GAGGTTGCAA	540
GCTTTGAGTC	AAATCCTGTA	CAAATTCTGC	CAAAGAAAGG	GTCGTCCATT	GTATAGGCAT	600
TTGTTGAGCC	TTAGATAAGG	TAAGAAGATG	CTCAACAATA	TGCTCAAGAC	GCAAACCTTC	660
TTTGTAAATA	ATGTCTAGAA	AGTCATCCTT	GAGCGCTCT	TCTTCAGCTG	ACATCCCTT	720
AATGGTTTCA	GCAAAGCCCT	TAATCGAAGT	AACTGGTGT	CTCAATTCAT	GGGAGGCATT	780
TGAGACAAAG	GCTAAATTAA	ACTTTTCATA	AGTTCTAATC	GTTGTTAAAT	CATATAGCAA	840
GACGAGCACA	GCTTCCACAG	ATTGGGTGGG	GCTAAAAACG	GGAACTGCTG	TCACTTCTAA	900
AATCAAGTCA	CCCTCATGAA	ACCCACTTAC	TTCTTGT	AACCTTGT	TTTGATCAA	960
GGCTTGGTGA	ACTAAATTCC	GAATATCCAT	CCGTTGAGG	TCATCAAGTG	AACTTATGTC	1020
GCCGTCCACA	TCGGGAAAAT	AATGAGGCAG	AGAGCGACTG	GATAATAACA	TCTGACCTTG	1080
AGCGGAAACT	AAAAACGTCC	CCATGGTTAG	GTGCGACAGA	AGAACCTCCA	TTGTTTCGGC	1140
TAGATCCTG	TATTGCTGAT	CCTGTTGGGA	GACTTTGGTT	TTTAGGCCAG	ACACATACTG	1200
AGCCAAAGAC	TTTAAGTCTT	CTTGCCCTTT	TTCTAAAAAG	TATTCACTAC	TGGTCAAGAG	1260
AGGTTGGTGC	AAGGTCTAA	AAGCAACTTC	CCATTTCCAA	AGGCAAAAGA	GCCAGTAGCC	1320
ACCTAGTCCC	AAAGAAAGGG	CTAGAAGAAA	GAGACCGATG	CCTTTACTGA	TCCAAGTTAA	1380
TGCCATCCCT	GCAATCAGAA	TGAGGCTAAC	ACTTAGATTG	ACTAGCCAAA	ATTGAAGGTA	1440
GCGTTTCATC	TATAACTCCT	TGAACTTATA	ACCATAACCC	CGAATGGTTC	GAATAAATTG	1500
AGGGGTTTA	GGATTGTCTT	CAATTTTTC	CCTCACTTA	CCAATATGAA	CGTCCACCAA	1560
ACGTGTTCC	TGCCCAAAGT	CATACCCCA	GATACGTTCC	AAAAGACGCT	CTCTAGTCAG	1620
TGTCATGTTG	GGATGTTCA	TAAGATAGAG	CAAGAGTTCA	AATTCTTTG	GGGTCAAAC	1680
CAGTAACCTA	TTCGCCTTGT	AGACTTCATG	ACGCTCAGGG	TATACTTCA	AGGTCCCAA	1740
TAGCCAAGAA	TCGTCAAGCA	TATTATCTGA	ATCATCTCCT	TCTTGTCTC	CTTAGTTCG	1800
CCTGAGGACA	GCCTTGACAC	GCGCCAGCAA	TTCTCTAGGG	CTAAAAGGCT	TGGTCAGGTA	1860
GTCATCAGCC	CCTAATTCCA	AGGCCAAAAC	CTTATCAAAT	TCATCACTT	TCGCAGAAC	1920
CATCATAATT	GGAGTTTGA	CGCCTTGGC	TCTCAGCCGC	TTACAAAAC	CCATGCCATC	1980
TAATTGTGGT	AACATGATAT	CAAGCAAGAT	AAAATCAAAG	GGTTCTGTT	CTGCCAAAGC	2040
TAAGGCCTTC	CGTCCATTG	TCACCAATTG	AGTAGAAAAG	CCTTCCTTAC	TTAAATGGTA	2100
GTCAAGCAAT	TTCAGAATGT	GTTCTTCATC	ATCCACTAAT	AAGACTTGTT	TTGTCATCTA	2160

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TTATCTCCTA TTGGTAACAT TATAACACAA TTATCAGAAA TCCTAACATT GCTAAATCAG	2220
ATTAATTTG CCTATCAAGA CTAGTATCTG GTCAAACGCT CAATCATCTC CTTGTGCTCT	2280
GGATAGGTCG CCAGTAGATC TACCCCTTCA AATAATTCAA AATCCTCAA TTCAAAACCA	2340
GGAGCAACAA GACAAGAAC CAGAGCATCA TCCTTATCAA CTGTTGATCC CCAAATAGTG	2400
CCCTTAGGAA CACAGTAGTG AAGTTGTTGC CCTTTGGATA TGTCCAGGCC TAAAGTGACT	2460
GCTTCGTAGT GACCACATCTGC TGTAATCATG TGAACAGTAA GTGGGGATCC TGCAATGAAAA	2520
TACCAAGATT CATCTGCTGT CAATCGGTGA AAATGTGAAG GATTCGTTTC TTCTAATAAG	2580
AAATAAAATAC TGGTATAAAG CGCCCTTCCC TTACCAGCAA GGTTTATAGT GTCTGAAGCT	2640
TTTTTTGTTT GTCTAAAATA GCCACCTTCA ATATGGGGAG CTAACTCTAG AGTTCTTATC	2700
AAGTCTCTT TATCCGTCGG AGCCAATGGG TTGAAGTAAC TCTTGTCAA AGTGGTTTA	2760
CGATTTCAAG AACTCCCTCTC AGTTCTGAGG ACACGGTAAT GATTGATGCG ACGGAAGTAC	2820
AAATCAATCG CCCTAAAAAA AGAATTAGCG AATGATTCTG GTAAAAAAA TGCCACGCTA	2880
TGAAGGCTCA AGCGATTGTC ACAAGTCAAG GGAGAATTGT TTCTTGGAT ATCGCTGTGA	2940
ACTATTGTCA TGATATGAAG TTGTTCAAAA TGAGTCGAG AAATATCGGA CAAGCTGGTA	3000
AAATCTGGC TGACAGTGGT TATCAAGGGC TCATGAAGAT ATATCCTCAA GCACAAACTC	3060
CACGTAAATC CAGCAAACTC AAGCCACTAA CAGTTGAAGA TAAAGCCTAT AACCATGCGC	3120
TATCCAAGGA GAGAACAG GTTGAGAACAA TCTTTGCCAA AGTAAAAACG TTTAAAATGA	3180
TTTCAACAAAC CTATCGAAAT CATCGTAAAC ACTTCGGATT ACGAATGAAT TTGATTGCTG	3240
GCATTATCAA TCATGAACTA GGATTCTAGT TTTGCAGGAA GTCTATTATT TGGTTAGGTG	3300
AATTAGTGAA GCGTTTAGGC AAGTGTCTCT GGTTACGAGC TCATGGACTC TAAATCGATT	3360
ATATTTAGGG GTCATGACTA GTGAAGCAGT TAGCTAGTTC GCATATAAGC GGCTAGCGTC	3420
TAACAAATTAG GAACTTTAGT TCCAATAACT TTAAGATTAC GACGTTTTAG GACATAAATC	3480
GATCATATTT ATGTCCTAAA ACTAGTGAAG CGCCTAGCCA AAGTCCGAAT AGGATTTGGC	3540
GTTAGTTACT TAGATTGCTT TGCAATCAAG TAACTTGGC GATTTACATC TTCTCTGGCG	3600
CTTCTACTCC AAGCAAGCGA AGGGCTTCTT TGAGAACGAC TGCGGTTGCG TAGCTGAGGG	3660
CTAGACGGCT GTCGCGTTCT GGGCTTCAT CCAAGATACG TGTATGTGCA TAGTATTG	3720
TAAAGGATTG AGCCAGGCTA ATTGCAAATT TAGCAATGAT AGAAGGTCA AAGTTATCTG	3780
CCGCACGGTT GATAATACGT GGGAAAGTCTT GAATGAGTTT AATGATTCC CAGCTTTCAG	3840
TATCATTCAA GCTATAGTTG CCAGCTGTTT CTGGTTTGAA ATCGGCTTGC CGTAAGATAG	3900
ATTGGATACG AGCGTAGGCA TATTGAACGT AAGGTCCAGT TTCACCCCTCG AAGGATACCA	3960

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TAGCCTCTAG	GTCGAAGTCG	TATCCATTG	TACGGTCGGT	TTTGAGGTCA	TAGAATTAA	4020
TGGCTCCAAT	CCCAACAGCA	TGTGCTACTT	GGTCTTTGTT	TTCTAGTTCA	GGATTTTAG	4080
CCTCGATTG	GACCTTGGCA	CGGCTAACAG	CCTCTGCAAC	AGTAGGGCTCT	AGCAAGATGA	4140
CATTCCCTT	ACGAGTAGAG	AGTTTCTTCC	CTTCTTTGT	AACCAAACCA	AAAGGAACGT	4200
GAGTAATGTC	GTCACTCCAG	TCGGTAGCCCA	TCTCTGCAA	GACAGCTTG	AGCTGTTAA	4260
AGTGGGCAGA	TTGTTCTTGA	CCAACGACAT	AGATAGATT	AGCAAATTGG	TATTCGTTTT	4320
TACGGTAGAG	GGCTGCAGCC	AAGTCACGTG	TGATATAGAG	AGTTGCACCA	TCAGACTTCT	4380
TGATGAGGGC	TGGATGTTCA	ATTCATATT	TCTCAAGATT	CACAACTTGG	GCACCTTCTG	4440
ATTCAAGAAG	TAGTCCTTT	TCAGAAAGAA	TGTCTACAAAC	TGCATCCATC	TTATCATTGT	4500
AGAAGGCTTC	TCCGTATAG	CTGTCAAATT	CAACCTTCAA	TTCATTGTA	AGGCGGTTAA	4560
ATTCCACTAA	ACTTTCATCG	CGGAACCATT	GCCAAAGAGC	GAGAGCTTCC	TCATCTCCAT	4620
TTTCAAGTT	ACGGAACCAT	TCGCGCGCTT	CTTCATCCAA	GCTAGGGTCA	TTTCAGCTT	4680
CAGCGTTGAT	GCGGACATAG	AGTTTAAGGA	GTTCATCGAT	TGGATGAGCT	TTTACAGCTT	4740
CTTCGTCGCC	CCATTTTTG	TAGGCAACAA	TCAACATCCC	AAATTGTTA	CCCCAGTC	4800
CCAAATGGTT	GACCTTGACC	GTTTGATAAC	CGATTTTTG	GAAAATATGT	GACAAGCTAT	4860
CTCCGATAAC	AGTTAACCGC	AGGTGGCCAA	TAGAAAATGG	TTTAGGGATA	TTCGGACTAG	4920
ACATGTCGAT	AACAACATTT	TCTGTTTAC	CAATATTTG	GTCAGCATAG	TGTTCTTTT	4980
CAGTGGTAAC	AGCTTGCAT	ACTTGAGCAG	AAATGGCAGA	TTTATCAAGG	AAAAAGTTAA	5040
CGTAAGGTCC	TGTTGGCACA	ACTTTTCAA	AGGCTTGGCT	GTTCATTTT	TCAGCCAGTT	5100
CAGCCGCAAT	CATTTGTGGT	GCTTTACGTT	CGACTTTGC	AAGAGAAAAA	GCAGGGAAAG	5160
CAATGTCCTCC	CATTTCTGAG	TTTTTAGGGG	TTTCCAGTAA	CTTTAAAATA	GCCTCTTGGT	5220
CCAGGCTATC	AATGATGCTA	GATAATTGCG	TAGCAATCAA	TTCTTTGTA	TTCATTAAGA	5280
GCTCCTTTT	GGACTTTCT	ACTATTTAT	CACAATTAA	AAGAAAGAAG	AAAAAATTAA	5340
TGAAATCTCC	TGTTTTTTG	GTATAATATG	GTTATAAAATA	TAGTTATAAA	TATGCACGCA	5400
AGAGGATTTT	ATGAGAAAAA	GAGATCGTCA	TCAGTTAATA	AAAAAAATGA	TTACTGAGGA	5460
GAAATTAAGT	ACACAAAAAG	AAATTCAAGA	TCGGTTGGAG	GCGCACAATG	TTTGTTGTGAC	5520
GCAGACAAACC	TTGTCCTCGTG	ATTTCGCGG				5548

(2) INFORMATION FOR SEQ ID NO: 110:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 3132 base pairs

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(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 110:

TACCCGGTAG TCTTAGCAGA CACATCTAGC TCTGAAGATG CTTTAAACAT CTCTGATAAA	60
GAAAAAGTAG CAGAAAATAA AGAGAACAT GAAAATATCC ATAGTGCTAT GGAAACTTCA	120
CAGGATTTTA AAGAGAAGAA AACAGCAGTC ATTAAGGAAA AAGAAGTTGT TAGTAAAAT	180
CCTGTGATAG ACAATAACAC TAGCAATGAA GAAGCAAAAA TCAAAGAAGA AAATTCCAAT	240
AAATCCCAAG GAGATTATAAC GGACTCATTT GTGAATAAAA ACACAGAAAA TCCCAAAAAA	300
GAAGATAAAAG TTGTCTATAT TGCTGAATTAAAG AATCTGGAGA AAAAGCAATC	360
AAGGAACTAT CCAGCTTAA GAATACAAAA GTTTTATATA CTTATGATAG AATTTTTAAC	420
GGTAGTGCCA TAGAAACAAC TCCAGATAAC TTGGACAAAAA TTAAACAAAT AGAAGGTATT	480
TCATCGGTG AAAGGGCACA AAAAGTCCAA CCCATGATGA ATCATGCCAG AAAGGAAATT	540
GGACTTGAGG AAGCTATTGA TTACCTAAAG TCTATCAATG CTCCGTTGG GAAAAATT	600
GATGGTAGAG GTATGGTCAT TTCAAATATC GATACTGGAA CAGATTATAG ACATAAGGCT	660
ATGAGAATCG ATGATGATGC CAAAGCCTCA ATGAGATTAAAGA CTTAAAAGGC	720
ACTGATAAAA ATTATTGGTT GAGTGATAAA ATCCCTCATG CGTTCAATTA TTATAATGGT	780
GGCAAAATCA CTGTAGAAAAA ATATGATGAT GGAAGGGATT ATTTTGACCC ACATGGGATG	840
CATATTGCAG GGATTCTTGC TGGAAATGAT ACTGAACAAG ACATCAAAAAA CTTAACGGC	900
ATAGATGGAA TTGCACCTAA TGACACAAATT TTCTCTTACA AAATGTATTC TGACCGAGGA	960
TCTGGGTTTG CGGGTGATGA AACAAATGTTT CATGCTATTG AAGATTCTAT CAAACACAAAC	1020
CTTGATGTTG TTTCGGTATC ATCTGGTTTT ACAGGAACAG GTCTTGTAGG TGAGAAATAT	1080
TGGCAAGCTA TTGGGCATT AAGAAAAGCA GGCATTCCAA TGGTTGTCGC TACGGTAAC	1140
TATGCGACTT CTGCTTCAAG TTCTTCATGG GATTTAGTAG CAAATAATCA TCTGAAAATG	1200
ACCGACACTG GAAATGTAAC ACGAACTGCA GCACATGAAG ATGCGATAGC GGTCGCTTCT	1260
GCTAAAAATC AAACAGTTGA GTTGATAAA GTTAACATAG GTGGAGAAAG TTTTAAATAC	1320
AGAAATATAG GGGCCTTTT CGATAAGAGT AAAATCACAA CAAATGAAGA TGGAACAAAAA	1380
GCTCCTAGTA AATTAAAATT TGATATATATA GGCAAGGGGC AAGACCAAGA TTTGATAGGT	1440
TTGGATCTTA GGGGCAAAAT TGCAAGTAATG GATAGAATTAAATACAAAGGA TTTAAAAAAT	1500
GCTTTAAAAA AAGCTATGGA TAAGGGTGCA CGCGCCATTA TGGTTGTAAA TACTGTAAAT	1560

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TACTACAATA GAGATAATTG GACAGAGCTT CCAGCTATGG GATATGAAGC GGATGAAGGT	1620
ACTAAAAGTC AAGTGTTC AATTCAGGA GATGATGGTG TAAAGCTATG GAACATGATT	1680
AATCCTGATA AAAAAACTGA AGTCAAAAGA AATAATAAAG AAGATTTAA AGATAAAATTG	1740
GAGCAATACT ATCCAATTGA TATGGAAAGT TTTAATTCCA ACAAAACGAA TGTAGGTGAC	1800
GAAAAAGAGA TTGACTTTAA GTTGCACCT GACACAGACA AAGAACTCTA TAAAGAAGAT	1860
ATCATCGTTC CAGCAGGATC TACATCTTGG GGGCCAAGAA TAGATTACT TTTAAAACCC	1920
GATGTTTCAG CACCTGGTAA AAATATTAAA TCCACGCTTA ATGTTATTAA TGGCAAATCA	1980
ACTTATGGCT ATATGTCAGG AACTAGTATG GCGACTCCAA TCGTGGCAGC TTCTACTGTT	2040
TTGATTAGAC CGAAATTAAA GGAAATGCTT GAAAGACCTG TATTGAAAAA TCTTAAGGGA	2100
GATGACAAAA TAGATCTTAC AAGTCTTACA AAAATTGCC C TACAAAATAC TGCGCGACCT	2160
ATGATGGATG CAACTCTTGT GAAAGAAAAA AGTCAATACT TTGCATCAC C TAGACAACAG	2220
GGAGCAGGCC TAATTAATGT GCCCAATGCT TTGAGAAATG AAGTTGTAGC AACTTTCAAA	2280
AACACTGATT CTAAAGGTTT GGTAAACTCA TATGGTCCA TTTCTCTTAA AGAAATAAAA	2340
GGTGATAAAA AATACTTTAC AATCAAGCTT CACAATACAT CAAACAGACC TTTGACTTTT	2400
AAAGTTTCAG CATCAGCGAT AACTACAGAT TCTCTAACTG ACAGATTAAC ACTTGATGAA	2460
ACATATAAAAG ATGAAAATC TCCAGATGGT AAGCAAATTG TTCCAGAAAT TCACCCAGAA	2520
AAAGTCAAAG GAGCAAATAT CACATTTGAG CATGATACTT TCACTATAGG CGCAAATTCT	2580
AGCTTTGATT TGAATGCGGT TATAATGTT GGAGAGGCCA AAAACAAAAA TAAATTTGTA	2640
GAATCATTTA TTCATTGAA GTCAGTGGAA GCGATGAAAG CTCTAAACTC CAGGGGAAG	2700
AAAATAAACT TCCAACCTTC TTTGTCGATG CCTCTAACTG GATTTGCTGG GAATTGGAAC	2760
CACGAACCAA TCCTTGATAA ATGGGCTTGG GAAGAAGGGT CAAGATCAA AACACTGGGA	2820
GGTTATGATG ATGATGGTAA ACCGAAAATT CCAGGAACCT TAAATAAGGG AATTGGTGGAA	2880
GAACATGGTA TAGATAAAATT TAATCCAGCA GGAGTTATAC AAAATAGAAA AGATAAAAAT	2940
ACACATCCC TGGATAAAAA TCCAGAATTAA TTTGCTTCA ATAACGAAGG GATCAACGCT	3000
CCATCATCAA GTGGTTCTAA GATTGCTAAC ATTTATCCTT TAGATTCAA TGGAAATCCT	3060
CAAGATGCTC AACTGAAAG AGGATTAACA CCTTCTCCAC TTGTATTAAG AAGTGCAGAA	3120
GAAGGATTGA TT	3132

(2) INFORMATION FOR SEQ ID NO: 111:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14672 base pairs

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(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 111:

CGAGATTCT	TTAAATGAAC	TACGTGAAAT	CTACCCATCA	TCCAGATCTG	GATATTCTCT	60
CCTATCTATA	AGTAAAGTTT	TAGGAGATTT	TAATATAAGT	TCTCATGCTT	TTAAAGCTTC	120
GGTAAGAGAT	TTAAAACCGC	TCAGTTCCC	ACTCATTTGC	TTCTGGGAGA	GTTCTCATTT	180
TATTATTCTT	AAAAAAATTA	GTAAAAACAA	GTTTTATATT	TTAGATCCTG	CAAAAGGCAG	240
GCAGAGAATG	TCAATAAGTG	AATTGAAAG	GCATTATTCA	AATATCATT	TAACATTTAA	300
AAAGTTAGAT	AGCTTTATGT	CTCGTAAAGA	TAATAAGAAG	TCGCCTGTTT	TAAAGTATT	360
TTTTAAGTAT	AGGAATAAGC	TAGGGATTTT	ATTTTTGTA	ACAGCATTAT	TGTATGTAAT	420
ACAATCATT	GTACCTATAG	CTAATAGATA	CATAATTGAC	ACGAATTCA	AGGACGATTC	480
GTATTCTGCT	AGAATGTTAT	TTACTATATT	ATTTATATT	ACTGTTTCAT	TCTCACTAAT	540
GTATTTATTA	AGACAGATAT	ATGTTGCATC	CTTAAATAT	ATAATGGATA	AAGAGATTAG	600
CTATGATTTT	ATGAAACATT	TGATATATT	ACCTTACAGT	TTTTATGAAA	AACGTACTTT	660
AGGGGATATA	CTTTTAGAG	CTAACTCTAT	TGTTTATATA	AGAGAAATAC	TATCAAATAA	720
TTTTATAGCA	GCTATACTTG	ATTTGTTAAT	GATTGTGGTT	TATGCTGTGG	TTTTATTTAG	780
CTTTTCTAAG	TACATGGTAA	TCTTTTAAT	ATCACTAAGT	CTAGCTCTAT	CTATTGTAAT	840
GTATCCAATC	ATAAAAATCT	CAAAAAATT	AATTGATAAA	AATATAAAAG	AAAAGTTAA	900
TGTTCAAAAT	ATTACTTCCG	AAGTAATTTC	AAAAAATAGT	GATATTAAGC	TAACGGAGA	960
AGAGGAATT	TGGATTAACA	AATGGGATAA	TTTAATACA	AAACAGCTCA	TCATAGGTG	1020
AAAACTTGAT	ATACATTAT	CAATTGTTAG	TAGTATAACG	AATGTTTAC	AAATTATTCT	1080
CCCTGTTTG	ACCCATTATTG	TAGGTGTAAA	TATAAAACA	TTCGAACAA	TGACGTTAGG	1140
ACAAATTGTA	GCAATAAGTA	CAGTCTCACC	ATACTTTATT	TCTCCTATAA	TTTCTTTAAG	1200
TGATAACTAT	ATACAATTAA	TGTTATTAAA	GGGATATT	TTAAGAATAG	AGGATGTGTT	1260
TAATACTAAA	TCCGAATTAA	TTCCAGAAAG	AGTCAGTC	GATATAAAAT	TTGATAAAAA	1320
AATAGAATTA	AAAGATATT	GGTATAAAATA	TGGATTATT	GATGATTATG	TTTGAAAGG	1380
AATAAAATGTT	ACTATTAAAA	AAGGAGAAAC	TGTTGCTATT	GTTGGAGAAT	CAGGTTCAAG	1440
TAAGAGTACA	TTAGCTAAA	TTTATTAGG	TTTATTAGAA	CCTAATATTG	GTTCAATAGA	1500
AGTTGATGGA	GTAGAAAAAG	AAGAAATTGG	TCAACATTG	TATAGAAAGA	TTTTGGAGC	1560

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AGTGTACAA AATTCAACCC TAAGTTATGG TACCTTAAGA GAGAATTGCA CATTGGACA	1620
CTTTGTTCA GATGAAGAAT TAATGACAAA TCTAAATTCA ATTGGTCTTA GCAATGTAGT	1680
TAAATCTTA CCTCTTGGAT TAGAGACAAT CATCGCTGAA GAAGGTAATA ACTTTCTGG	1740
AGGGCAGCAG CAAATGATAC TTTTAGCTCG TTGTCTTTG TCGAACCTT CGGTAGTTGT	1800
TTTGGACGAA GCAACAAGTA GTTTAGATAA TTTATCTCAA CAAATTACAA CTTCTTACTT	1860
AAGTGAAATC GGTACCACTA AGATTTAAT TGCCCATCGA CTAGATACTA TCAAGTCTGC	1920
AGATAAGATC TTGTAATGC ATAATGGTGA AATTGTAGAG ATTGGGACCC ATAGAGAACT	1980
TCTTGAACTA GGAGGCATTT ATAAGCAATT GTATTCAAAT AATTAGTTT TGATTAAG	2040
GGTAAATTGAGATTAT GAAAAAAA TATTGGACTT TAGCGATATT ATTCTTTGT	2100
TTGTTCAATA ATTCTGTTAC TGCTCAAGAA ATACCTAAA ATCTTGATGG CAATATAACT	2160
CACACTCAGA CTAGCGAAAG TTTTCTGAA TCTGATGAAA AACAGGTTGA CTATTCTAAT	2220
AAAAATCAAG AAGAACTAGA CAAAATAAA TTTCGTATTC AAATCGATAA GACAGAATTA	2280
TTTGTAAACAA CAGATAAACAA TTTAGAAAAA AACTGTTGTA AATTGGAAC TGAACCACAA	2340
ATAAAATAACG ATATTGTTAA CTCTGAAAGT AATAATTAC TAGGCGAAGA TAATTTAGAT	2400
AATAAAATTGAGGAAATGT TTCTCATCTA GATAATAGAG GAGGAAATAT AGAGCATGAC	2460
AAAGATAACT TAGAATCGTC GATTGTAAGA AAATATGAAT GGGATATAGA TAAAGTTACT	2520
GGTGGAGGCG AAAGTTATAA ATTATATTCT AAAAGTAATT CTAAAGTTTC AATTGCTATT	2580
TTAGATTTCAG GAGTCGATTT ACAAAATACT GGATTACTGA AAAATCTTTC AAATCACTCA	2640
AAAAACTATG TCCCCAATAA AGGATATTAA GGAAAAGAGG AGGGAGAGGA AGGAATAATA	2700
TCAGATATTC AAGATAGATT AGGTCACTGG ACAGCTGTTG TAGCTCAAAT TGAGGGAT	2760
GACAATATTA ATGGAGTAA TCCCTCACGTT AATATTAACG TCTATAGAAT ATTTGGTAAG	2820
TCGTCAGCTA GTCCAGATTG GATTGAAAA GCAATTGTTG ATGCTGTAGA TGATGGCAAT	2880
GATATTATCA ATCTTAGTAC TGGACAATAT TTAATGATTG ATGGAGAATA TGAGGACGGA	2940
ACAAATGATT TTGAAACATT TTTGAAAGTAT AAAAAGGCTA TTGATTACGC GAATCAAAA	3000
GGAGTAATTA TAGTAGCTGC ATTAGGGAAT GACTCCCTAA ATGTATCAA TCAGTCAGAT	3060
TTATTGAAAC TTATTAGTTC ACGCAAAAAA GTAAGAAAAC CAGGATTAGT AGTTGATGTT	3120
CCAAGTTATT TCTCATCTAC AATTCGGTC GGAGGCATAG ATCGCTTAGG TAATTTATCA	3180
GATTTTAGCA ATAAAGGGGA TTCTGATGCA ATATATGCGC CTGCAGGCTC AACATTATCT	3240
CTTTCAGAAT TAGGACTTAA TAACTTTATT AATGCAGAAA AATATAAAGA AGATTGGATT	3300

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TTTTCGGCAA CACTAGGAGG ATATACGTAT CTTTATGGAA ACTCATTGTC TGCTCCTAAA	3360
GTTTCTGGTG CGATTGCAAT GATTATTGAT AAATACAAAT TAAAAGATCA GCCCTATAAT	3420
TATATGTTG TAAAAAAATT CTGGAAGAAA CATTACCAAGT AAAAAATGGT ATAAAAGTGT	3480
TAAATATACC AAACGTATTG AGATATGATT TGAATATGTT ACAATTAGAA TATAAAATG	3540
AAACAAAGTTG GGATAGTTTC ATAGATAATG TTAATTAAAT TGAGTTGGAA GAGAGAATTG	3600
AAACTACTAT TGGAATTAAA CAAATAAACAA CACACAATAT TATTACTATT GCCCGAGAAG	3660
GGTACTCTCA AAATTATTTA CCTAACACTT CAGAAAATAC ATATAATTCA TTACAAGTCA	3720
GTTTAGTTGG AGTATTACTA CTTTTATATA GTATGGTAAA TATTTTATGG GCTAAAAAAA	3780
GTAAATGAAA ATAAAATTG GAGCCCTCTG AAAAGTAAG TCCTACAGTT CAACTAAAAT	3840
GAGTCAAAAG ATGAATCACC TTGATGTAGG GGAGTTGTC TTATTGCTGC CTGAACACCT	3900
CCGTTCAAGAG GAAGAACATT ATAAATCTGT TTTGAAAGAC GACTTAACCA GTCGCATATC	3960
TAGTCAAGAT GAACGACAGC AAATGACTGC TACGGTAGGT TATTTAGAAT CAGGTCAGGA	4020
TCGTTTGTG TATAATACGA CCCCTATTTC TTACCAGCAG TTTTGAAGAG ATCCAATCAT	4080
CATTGTTATA ACACCCCAAT CAACTGGTCC ACAGTCCATT TTGTTTGGGA TAGACGCAGT	4140
ACAGAACTAC GTTCTCTTA ATCAATTGTC TGATGCCAG GAGCTTATCC AGAGACAAGG	4200
CATTGAAAAT TGGGTCTCAG AAATGCAAAC AGGTTACCAAC AACTACATCA CATTATTGG	4260
TAATATCCAG AGGGAACGTT GGGTAATGCT AGCAGGAGCT GTGCTTGGGA TTGCAACTTC	4320
AATCTTGTG TTTAACACTA TGAATAGGCT CTACTTTGAA GAATTTAGAC GTGCCATT	4380
TATCAAACGC ATTGCAGGTC TCAGGTTCTT AGAAATCCAT CGCACTTATC TCTTGCTCA	4440
ACTGGGTGTG TTTTTACTGG GATTGTTGTC GAGTGTATTT CTTCAGGTAG AGATAGGAGT	4500
TGCTTTCTTA GTCTTGTAC TCTTTACTGG TCTATCTCTT TTACAGTTAC ATGTCAAAT	4560
GCAGAAAGAA ACAAGATGT CCATGCTTGT TTTGAAGGGA GGTAAATATG ATTGAACCTTA	4620
AACAGGTGAG TAAATCTTT GGAGAACGAG AGTTATTTTC GAATCTTCA ATGACATTG	4680
AGGCTGGAAA AGTCTATGCC TTAATTGGTT CAAGTGGTAG CGGAAAACAA ACCTTGATGA	4740
ACATGATTGG GAAATTAGAA CCTTATGATG GGACGATTTT TTACCGAGGT AAAGACTTGG	4800
CCAATTATAA ATCAAGTGAT TTTTCCGTC ACGAATTGGG CTACCTCTTC CAGAACTTTG	4860
GCTTAATTGA AAACCAAAGT ATTGAAGAAA ACCTTAAGCT AGGTCTCATT GGTCAAAGT	4920
TGAGTCGGTC GGAACAGCGG TTGAGGCAGA AGCAGGCTTT AGAACAGGTC GGCCTGGTT	4980
ATCTTGACCT AGATAAGCGC ATCTTGAGT TATCGGGCGG AGAATCGCAA CGGGTTGCCT	5040
TGGCAAAAT TATCTAAAG AATCCACCCCT TTATTCTGGC AGATGAGCCA ACAGCTTCAA	5100

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TAGACCCAGC AACCTCTCAG TTGATTATGG AGATTTGCT ATCTCTCGA GATGATAATA	5160
GGCTAATCAT TATCGCAACA CATAATCCGG CAATTTGGGA GATGGCTGAT GAAGTGTCA	5220
CGATGGATCA TCTGAAATAA AAATCCTTGT TTTTAATTGC ACGATGAGTT ACTGAAATAT	5280
TATCATGAAT CAAGAATTGG AGTTAATTAA GAATTGTACT TAATTTAGAA TTGTACTTTA	5340
TTAATATTGA GGTAACCTTT TCTTGATAAA GGAAGAAATA ATGGAGAGGA AGTTAGAATG	5400
AAAAATTCG ACAATTATAT TATTGAGAAG CCTTGCGATT CTAATTAGA TAAACTGCAA	5460
AAAATCTAA TAATTGAAAG TTTGGTAGAT GATATTTGC AATTTCTCT CAGAATCAAT	5520
AATAGTGTAG GAGAGATTT CCTCCTACAA CCGTTTAAAG AGAAAACAT CTTTATTCCA	5580
TGTTATTTG AGGAAGATAT TGTGAAAGTC AAAGATGATG ATAAAGTTGA GTGGAATTTG	5640
TTAGAATTTC AAAAATTTAG AGCATTTTG GCTTAGTAAT CTGTGTTGAA GGCTCAAAAC	5700
CTATGGTAA AAAGTAGCTT TGAAAACGTA TTGCTCCAA AGATTTAGTT AAATAATGAT	5760
TTAACACAAA AAGAAATTAT TGAAGTTCTG GAAAGATGTT GTTTCAGTAT TGAGAAAAGG	5820
TGGGAAAAAC TTGCGATTTT CACAGAGAAA GGAAGAAAAA GTATAGAAAT ATAGTCAATT	5880
GAAACAAGAA CAGGATAAAA GAACCTTTG TGCCATATT TTCTCCTTTC GCTTACAAT	5940
TGGATTGAAC ACCTTTATTG TATCGCGTTT GGAGTTTTT TGGTATAACC TTCGACGCAC	6000
ACCCGCATAG CGGGTGTGTTT TTTTGTCTCG CACCTAACGG AGCGAGACAA ACTAATAGTC	6060
ACTTAATCAA AAAACGCACC ATATCAAAAAA CTAAAAAGTT TGATATCATG CGTCATGTCT	6120
TAAACTAATT GACTATACTT TCTATTCAA TGAGCTTTA ACCAATTGAT TGAGCCAATC	6180
CACTCTAAA ACCAAAGACC AATTCTCGC TTAGCTGACT CTTCTGAATC TGAACCATGT	6240
ACAACATTTC GGATAATCTC ATTTCTCCA GCAGCTTTG CAAAATCACC TCGAATAGTG	6300
CCTGGTAAAG CTTCTCTGG ACGAGTTGCA CCCATCATGG TCCGCCAAGT TTCGATTACT	6360
TTGGGACCAAG AAATGACACC CACAAGAACT GGACCTGAAG TCATGAATTC ACGAATCGGT	6420
GGGTAAAAAC TCTGACCAAC CAAGTCCTGA TAGTGCTGGT CAATCAACTC TTCTGAAACC	6480
TGTGAACGAA ACTCCAATT TTGATTGTA AATCCACGTT GTTCGATGCG CTTAACACT	6540
TCACCCACTA GCCCTTTT TACACCCTCT GGTTTGATGA TAAAGAATGT TTGTTCCATA	6600
CCCGTCTCCT TTGTCAGCTT CTTCTTTA TTTTACCAACA TTTCGTGGAA AAATGGAGAA	6660
AGTTTCAGA AGAGAGAATG AGAGAACCT CGGGTTCTCT CATTCTCTCT TATTCTACTG	6720
TTTCTTCCAC AGTTCAACG GCAGTATCCA CAACTACTTC TGTTGTTCT TCATTCCTT	6780
CTTCCTCTAC TGGAGGATTA AGGTATTCTT CTTCGTGAC AGCATGTGGT TCAAGGTTAC	6840

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GGTAACGGGC CATAACCAGTA CCAGCTGGGA TGATCTTACC GATGATAACA TTTTCTTTAA	6900
GTCCAAGGAG ATGGCTTTC TTACCACGGA TAGCTGCGTC AGTAAGGACA CGAGTTGTT	6960
CCTGGAAGGA AGCCGCTGAC AAGAAACTGT TTGTTCAAG TGAGGCTTTG GTAATTCCA	7020
TAAGGACTGG GCGACCTGTC GCTGGAACCTC CACCTGCGAT AAGGACATCT TTGTTGGCAT	7080
CTGTAAAGTC ATTGATATCC ATGAGGGTAC CCATGAGAAG ATCTGTATCA CCTGGATCCA	7140
TGACACGGAC TTTACGGATC ATTGACGAA CCATTACCTC GATGTGTTG TCACCGATTT	7200
CTACCCCTTG GCTACGGTAA ACTTTTGTA CTTCACCGAG AAGGTACGTT TCAACTGACA	7260
AGACATCACG AACTGCAAGG AGACGTTTG GTTGGATAGA ACCTTCTGTC AGAGCAGCAC	7320
CACCGCGCTAC TTGGCCCCCA ACTTCGACAC GCATACGAGC TGTAATGGA ACGACATATT	7380
CACCTTCGCC AGTTTCACCC TTAACAAAGA CTTTCTTGGT ACGAGTTGAT GCATCTTCTT	7440
CGATAGCAGT AACTTGTCTT TTAACCTCTG TAATAACCGC TTCCCTTTA GGATTGCGGG	7500
CTTCAAAGAT TTCTGGACA CGAGGAAGAC CCTGAGTGAT ATCGGTATTT GAGGCAACCC	7560
CACCTGTGTG GAAGGTACGC ATTGTAAGCT GTGTACCAGG TTCCCCGATA GATTGGGCAG	7620
CGATTGTACC AACTGCTTCA CCAACTTCAA CGCGATCACC AGTCGCCAAG TTGATACCGT	7680
AACAGTGACG GCAGACACCG TGACGAGTGT TACATGTAAA TACAGAACGG ATAGTCACCT	7740
CTTCCACACC AGCATTGACA ATTTCACGCG CCTTGTCTTC TGTAATCAAT TCATTTGGAC	7800
CAATAATCAC TGCACCAGTT TCTGGATGTT TAACAGTTTT CTTAGTGTAA CGACCGTTGA	7860
GACGCTCTTC GAGAGACTCG ATCATCTCTT TTCCCTCTGC GATAGAACGG ATCAAGAGAC	7920
CACGGTCAGT TCCACAGTCG TCCTCACGGA TGATAACGTC TTGGGCAACG TCGACCAAAAC	7980
GACGAGTCAA GTAACCTGAG TCGGCTGTCT TAAGGGCCGT ATCGGTCTA CCTTTACGAG	8040
CACCGTGAGT TGAGAAGAAC ATTCCAATA CCGACAAACC TTCGCGGAAG TTTGAAAGGA	8100
TTGGCAATTC CATGATACGT CCATTCGGAG CAGCCATCAG ACCACGCATA CGGGCAAGCT	8160
GTGAGAAGTT TGAGATGTTA CCACGGGCTC CAGAGTCCAT CATCATAACG ATTGGGTCT	8220
TAGGATCTTG GTTACCAATC AAGCGTTCT CAAGTTTTTC ACGGGCAGCA CGCCATTAG	8280
CTGTAACAGC ATTGTAACGC TCGTCGTCTG TGATCATACC ACGACGGAAT TGTTGGTGA	8340
TTTGTTCGAC ACGTTGTGT GATTCTCAA TGATTCAGC CTTGTCTA ACGACTGGGA	8400
TATCGGCAAT ACCCACTGTC AATCCTGCAA GAGTTGAGTG GTGGTAACCG AGGTTCTTCA	8460
TGCGGTCAAAG TAGGGCAGAA GTTCTGTGCG TACGGAAACCG TTTGAAGATT TCAGCGATGA	8520
TATTTCCAAG GTTTCTTC TTGAATGGAG GGTTGAGCTC AAGATTGCTG ATAGCTTCCT	8580
TGATATCTCC ACCAAGTGGC AAGAAGTATT TAGCTGGAAC ACCTTCTGTC AAGTTGGCAT	8640

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TGTTTGGTTC TTGCAAGTAT GGTAGCCCT CTGGCATGAT ATCGTTGAAG AGAATTTCAC	8700
CAACTGTTGT AAGCAAGACC TTATGTCCTT GCTCTCTGT CCAAGGCTTG TTGAGGCTGT	8760
CTGTTGCGAT ACCAACACGT GAGTGGAGGT AACATAACC ATTGCGGTAA GCCATAACCG	8820
CTTCGTCACG GTCTTGAAG ACCATTCCCTT CACCTTCGCG ACCAGCTTCT TCCATGGTCA	8880
AGTAGTAGTT ACCCAAAACC ATGTCCTGAG ATGGAGTAAC TACCGGTTTC CCATCTTCG	8940
GGTTCAAGAT GTGCTCAGCA GCTAGCATGA GGATACGAGC TTCTGCTTGT GCTTCTCTG	9000
AAAGTGGTAC GTGGATGGCC ATTTGGTCCC CGTCAAAGTC AGCATTGTAG GCTTCACAGA	9060
CAAGTGGGTG CAAGCGAAGA GCCTTACCAT CAATCAAGAC TGGCTCGAAG GCTTGGATAC	9120
CCAAACGGTG AAGGGTCGGT GCGCGGTTCA AAAGCACTGG GTGTTCTTAAATCACCTTCTT	9180
CAAGGATATC CCAGATAACGC TCATCTCCGC GTTCCACCAA GCGTTAGCT GCTTGTACGT	9240
TTTGCACGAT ATCACGGGCA ACGATTTAC GCATGACAAA TGGTTTAAAG AGTTCAATCG	9300
CCATTTCACG CGGCACACCA CATTGGTACA TCTTAAGAGT TGGACCAACG GCGATAACTG	9360
AACGTCCCTGA GAACTCAACA CGTTTACCGA GCAAGTTTG ACGGAAGCGT CCTTGTTTAC	9420
CTTTAAGCAT GTGGCTCAAT GATTCAATG GACGGCTACC TGGTCCTGTG ATTGGACGAC	9480
CACGACGACC ATTGTCAATC AAAGCGTCAA CTGCTTCTTG AAGCATAACGC TTCTCATTTC	9540
GAACGATGAT ACCTGGTGCA TTTAACTCAA GCAACCGAGC CAAACGGTTG TTACGGTTGA	9600
TAACACGGCG GTAAAGGTCA TTCAAGTCAG ATGAGGCAAA ACGGCCACCA TCCAAGTGCA	9660
ACATTGGACG AAGATCTGGT GGGATAACCG GAAGGATGTT AAGAATCATC CATTCAAGGTT	9720
TGTTTCCAGA CTTGTAAAAG GCATCCAAAA CATCCAAACG ACGGATGGCT TTGACACGCT	9780
TTTGTCCAGT AGCTGTTTTC AATTCTTCTT TGAGTTTCAGC AATTCTTTT TCAAGATCTA	9840
CTTGCTTCAA AAGGTCTTGG ATGGCTCCG CACCCATCTT GGCAACAAAT GAACCATAAC	9900
CATATTACG CAAGCGCTCT CGGTATTCGC GCTCTGTAT GATAGACTTG TGCTCAAGTG	9960
GTGTATCCTT AGGATCAATC ACCACATAAG CCGCAAAGTA GATAACTTCC TCGAGGGCAC	10020
GAGGGCTCAT ATCAAGGGTC AAGCCCACAC GGCTTGAAT CCCCTTGAAG TACAGATGT	10080
GAGATACAGG AGCTTCAAT TCGATATGTC CCATACGCTC ACGACGAAC TTCGTACGCG	10140
TTACTTCAAC CCCACAGCGG TCACAAACAA TTCCTCTGTA ACGAATGCGT TTGTACTTAC	10200
CACAAGCACA TTCCCAGTCT TTTGTAGGAC CAAAGATCAC TTCATCAAAG AGTCCTTCAC	10260
GTTCTGGTTT CAAGGTACGA TAATTGATTG TTTCAGGTTT TTTGACTTCT CCATAAGACC	10320
ATGAACGGAC TTTACTTGGA GAAGCTAGGG TGATTTGCAT ACTTTAAAA CGATTACAT	10380

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CAACCACCAT	TTCTTCCCTT	TCTATTCTAA	GTGAACTGCT	TATTCTGTGTT	CAGCAGCTTC	10440
TTCTGTTGCT	TCCGCTTTG	TTGCTTTCTC	AGCTTCTTCA	GCTTCAAAGG	CTGCTTTAGC	10500
CTCTTGGGCT	GCTTTTCGC	GGGCTTTTC	AAGGTCATCT	ACGTGGATGA	CATCTTCGTC	10560
CATTCTTCA	TCCAAGTCGC	GAAGTTCCAC	TTCTTGGTCA	TCTTCGTCTA	GGACACGCAT	10620
GTCAAGACCA	AGAGATTGCA	ATTCTTTGAC	AAGAACTCGG	AAGGATTCTG	GAACACCTGG	10680
TTTTGGAATT	GGTTTGCCTT	TTGTAATAGC	TTCATAGGCT	TTCAAACGTC	CGTTGATATC	10740
GTCCGACTTG	TAAGTCAAGA	TTTCTTGAAG	GACATTTGAC	GCACCGTAGG	CTTCAAGAGC	10800
CCAAACCTCC	ATCTCACCGA	AACGTTGTCC	ACCAAACCTGA	GCCTTACCTC	CGAGTGGTTG	10860
TTGGGTAACA	GTTGAGTATG	GTCCGACTGA	ACGCGCGTGC	AATTATCAT	CAACCATGTG	10920
GTGGAGTTG	ATCATGTACA	TGACTCCGAC	AGAAACACGG	TTATCAAACG	GTTCACCAGT	10980
ACGTCCATCG	AAAGGATCG	TTTTGGCATC	GCTATCCATA	CCTGTTCTT	TAACAGTTGA	11040
CCAAAGATCT	TCAGAACTTG	CTCCATCAAA	GAETGGTGT	GCGATGTGAA	TACCAAGAGT	11100
ACGAGCTGCC	ATACCAAGGT	GAAGCTCCAT	AACCTGACCG	ATATTCAAC	GTGATGGTAC	11160
CCCAAGTGGG	TTCAACATGA	TGTCGACTGG	AGTTCCGTCT	GGAAGGTAAG	GCATGTCTTC	11220
TACAGGAACG	ATACGAGAGA	CAACCCCTTT	TTTCCGTGA	CGTCCGGCCA	TTTTATCTCC	11280
GACCTTAATC	TTACGTTTT	GAGCGATGTA	AACACGAACC	AACATGTTAA	CACCTGATTG	11340
CAAATCCT	CCATTTACAC	GTGTAAAGAT	CTTAACATCA	CGAACGACAC	CATCGGCACC	11400
GTGTGGTACA	CGAAGAGAAG	TATCACGCAC	TTCACGAGAC	TTGTCCTCAA	AGATAGCGTG	11460
CAAGAGACGT	TCTTCAGCTG	AAAGATCTTT	CTCACCCCTTA	GGTGTACTT	TACCTACAAG	11520
AATATCACCT	TCTTTAACCT	CAGCACCAAT	ACGGATAATC	CCCATTCGT	CAAGGTCTTT	11580
GAGGGCATCT	TCACCAACGT	TTGGAATTTC	GCGAGTGATT	TCTTCAGGCC	CAAGCTTGT	11640
ATCGCGCGTT	TCTGATTCTG	ATTCTTCAAG	GTGAAACAGAT	GTGTAGACAT	CGTCCTTCAC	11700
CAAGCGTTCG	CTCATGATAA	CGGCATCCTC	GAAGTTGTAA	CCTTCCCAAG	TCATGTAGGC	11760
AACGATTGGG	TTTTGTCCAA	GCGCCATTTC	TCCATTTCC	ATAGAAGGTC	CGTCAGCGAT	11820
GAAATCGCCT	TTTTCAACGA	CATCACCAAC	TTTACGAGA	GTGCGTTGGT	TGTAAGCAGT	11880
ACCTGAGTTT	GAACGACGGA	ATTTTGGAT	GTGGTAAACA	TCCAATGAAC	CATCTTCACG	11940
ACGAACCTCT	ACCTGTCAG	CATCTCGCTA	AGTAACCTTA	CCATCATACT	GAGCAATCAC	12000
AGCCGCACCA	GAATCGTGGG	CTGCTTGGTA	TTCCATACCA	GTACCAACGT	AAGGTGCCTG	12060
AGGATTAATC	AATGGCACAG	CCTGACGTTG	CATATTGGCT	CCCATGAGGG	CACGGTTGGA	12120
GTCATCGTT	TCCAAGAAAG	GAATACATGC	TGTCGCAACG	GCAACTACCT	GTGTTGGTGA	12180

AACGTCCATG TAGTCAACAA TATTAGCTGG ATACTCTGG TTGACCCCTT GGTGACGTCC	12240
CATGACAATC TTCTCAGCAA AGGTTCCATC TTCATTAGA CGAGAGTTAG CCTGAGCTAC	12300
AGTATATTCA TCTTCATCAGCTGTCAA CCAAACAATT TCGTTCGTGA CAACACCTGT	12360
TTCACGGTCA ACCTTACGGT ATGGTGTGG AACAAAACCA TATTGTTCA AGTGTCCATA	12420
AGATGACAAG TTATTGATCA AACCGATGTT AGGTCCCTCA GGTGTCTCGA TTGGACACAT	12480
ACGACCATAG TGAGTGTAGT GCACGTCACG TACTTCATAT CCAGCACGGT CACGAGTCAA	12540
ACCACCAGGT CCTAAGGCTG ACAAACGGCG TTTGTGAGAC AACTCAGAAA GCGGGTTGTG	12600
TTGGTCCATG AACTGTGACA ACTGTGATGA ACCAAAGAAAT TCTTTAACTG CAGCTGTTAC	12660
AGGACGGATA TTGATAATTT GTTGTGGTGT CAAGACTTCA TTGTCCTGAA CAGACATACG	12720
TTCACGGACA TTACGTTCCA TACGAGAAAG TCCCAAACGT ACTTGGTTGG CAAGCAATT	12780
ACCAACCGCA CGGATACGAC GATTCCAAG GTGGTCGATA TCATCTACAC GGCAAGTCC	12840
TTCAGCCAAG TTGAGGAAGT AGCTCATCTC AGCAAGGATA TCTGCAGGAG TCACCGTACG	12900
AACCTTGTCA TCTGGTTAG CATTACCAAT GATCGTTACG ACGCGATCTG GATCAGTTGG	12960
AGCAATAACC TTGAATTTT GAAGAACAAAC AGGCTCAGTC ACAACGGCTG CATCGTTGG	13020
GATGTAGACA ATCTTGTCA AGTCGCCATC CAAATGGCTT TCAATGCTTT CAATCACGCT	13080
ACGAGTCATA ATCGTACCAAG CTTCTACCAA GATTCTCCA GTTTCAGGGT CTACCAATGG	13140
CTCTGCAATG GTTGGTTGA GCAAACGTGT TTTAACATTG AGTTTTTTAT TGATTTGT	13200
ACGACCAACT GCTGCCAAGT CATAACGACG TGGGTCAAAG AAGCGAGCTA CAAGCAAGCT	13260
ACGTGAGCTT TCAGCCGTCT TAGGCTCAC TGGACGAAGG CGTTCGTAAA TTTCTTCAA	13320
GGCTTCGTCT GTACGAGAGT CCATTGGATT CTTGTGGATA TCTTTTCAA CAGTGTGCG	13380
AAACCAATTG CTGTACCAAA AGATATCAA GATTCATCA TCACCTGAGA AACCAAGAGC	13440
ACGAACCAAG GTTGTAAATG GAATCTTACG AGTACGGTCG ATACGAGTGT AGGTGATATC	13500
TTTTGAGTCG CTTCAAGTT CCAACCAAGC TCCACGGTTA GGGATAACAG TTGAACCATA	13560
GCCCACCTTA CCATTGGTCT CTACTTGTGTC GTTAAAGTAA ACACCTGGTG AGCGGACCAA	13620
CTGAGAAACG ATAATACGTT CACCACCATT GATGATGAAA GTACCCATT CTGTCATGAT	13680
TGGGAAATCA CCAAAGAAAA CTTCTGGGT CTTGATTCG CTTGTTCTT TATTGATCAA	13740
ACGGAAGGTT ACAAAATG GTGCTGAGTA GCTAGCATCG TGGATACGAG CTTCTCTAG	13800
CGTATATTGTT GGTCCTTGA TTTCATATCC AACAAATTCC AACTCCATTG TGTCTGTGAA	13860
GTTTGAAATT GGCAATACAT CTTCAACAC TTCTTAAGA CCGTGGTCTA GGAAAGCTTT	13920

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GAATGAGTCA	GTGTAAGTCA	AGAACTTCTT	TGATTCTTGA	13980
AAAAC TACGA	CGGGTACGAT	GTTC CCGTA	TTGAACGTCA	14040
CCTTGTA	AAAGTTCAA	GCCTTGTCAA	TCAGGTTTT	14100
AACCCCTTAT	CACCGTGTCC	TCTTGACGAA	TTTCAGAAT	14160
TGCTCAA	AAAT	CTTGAAGCTT	CTGTTACAAA	14220
TTAACTGCTG	TGAGCCTGT	CTGGACAATA	TTTCAGACAA	14280
CCATATTATA	CCCTATTTAG	CTAGATTTT	CAAGGGTTT	14340
TTTCCCATA	AAAAACTTGG	CATCACATTC	GAATCACGCT	14400
AACTATTGAC	TGAAAATCAT	TTTCAAGGTA	TAATAATAAA	14460
GTGGTAAGGC	ACGGCTCTGC	AAAAGCTTGA	TCGTCGGTT	14520
ATAACTTGAT	TTATCAGGTT	TCAAATGAAC	AGAAAGCCCA	14580
TTTCCCTCGA	ATAAAATACGT	ATAACTTTAA	AAACTTTGG	14640
CTTCCATGG	CATAATTCCC	TTTGAAATC	AG	14672

(2) INFORMATION FOR SEQ ID NO: 112:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 7902 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 112:

AGGAGACTAT	TCAAGCCAA	ATTgAGTAC	CCAGCAAAGA	CTGTATAGAC	TGTGATACGT	60	
TTTTCATAGC	CATTGGTAA	AAA	GAGAATTG	GAACCAAGAA	TGGTATCTAA	GGCCAGGATA	120
ATCGTACGAA	AAGCGAAGAG	AGAGGTCAAG	ATGCCGCCTC	CGATATATTT	TTCACTACCG	180	
TAAAGTAGGA	TGGCATTG	GG	TCCTAAAACC	ATGAGTCAA	AACTCAGTGG	AATGATAAAG	240
AAGTTAAAGA	TTCGACTACC	TCTATTAACC	AGAGAAACAT	AGGTTCTT	GTCTCCTT	300	
CCCAGATAGT	AACTGAGACG	AGGCACACTC	ACTCCAATTG	CACCTGTTAC	AAACCCAGCT	360	
ATAACGGTCA	CAATTGCTG	AGCTATGGTA	TAGTAACAA	CGTTGACATC	AATCCCTGTT	420	
TTAACGAGGA	AGAGGCATC	TA	AAAAAAAGTG	AAGAGCATAT	TGGCATTGGC	AAAGACTAAC	480
ATGGCTGTCA	GAGGGAGAAA	GAGTGGTTA	AAATCACTTA	GGTGAATT	AACAAGTTG	540	
ATGTCTCTT	TAATCCAAA	ATAACTAATC	AGGTAGTTAA	TCAGCGTCGA	TAAACTCATC	600	
ACAAGTGTAT	AGACAACAAT	ATCGTGTCA	TTTTTAACAA	ATAAGAAAAT	AGAGACCAGC	660	

815

ATCAGGATAAC GGATGAAGGC AGTTTTGTAA AAGAGAAAAC TGTAATTTC CAGAGCTTC	720
TTGACCCATT CGATTGAAAA AATCTGGGCA ATGAGTTGAA TCCCCATAAC AAGGTAGACC	780
TTTTTGACGA TTGGATTATC AGTAAAGAAG AGAGGGATAGG CTAGGATATA GACAGCAGTG	840
GTCAAAATCG TACAAGCGAT GCACAAATAA AAAAGACTAG AAAAGGTTCT GTTAAGATCT	900
TTTTTGTAT CCTTGACATT ACTGATAGCC CTTAAACCGT AGTTATAGAC ACCATAAGTT	960
GCAAAGGGCA AGAAAAATGA CAAAATAGTG TCGACTGAGT TGAAAGTAACC ATAGTCAGTT	1020
CGGTCCAAGA CACGCGCAG ATAGGTTCCA GTTAGGATGG GAAAATAAT ATTCAAGACA	1080
CGAATTCCCA TGTAAGATAG AGCATTAAAT TTTATACTTT TCATTCAATT TACCTCGTT	1140
TTCATTATAT CATAAAGTTA GCTAATAAGA AATGAAGGGC AGTAAGTCAA GTAATCACTT	1200
TGAAGTTCA AATCTTAAGT TTTAAGTTTT CTTTAAGGAA AGTATATTAT TCTGAAGGAC	1260
TCTAAAATTT CGCAGCCATT TATTAGTAAT TGCTACAGAA TTCTAGTCA TTACTAGAAA	1320
TGGACTAGTT TCTTGAAATA ATAGAACTGC ATAATTCTCC TATTCTAGAA GGGGAGGACC	1380
AGTATTTCTT TTATGATAGG ACTAGATTGT GGTATAATAG AGAGAATAAG TTTTTTAGT	1440
AAGACAAAGG AGAAAATAGA TGATTTATGC AGGAATTCTT GCCGGTGGAA CTGGCACACG	1500
CATGGGGATC AGTAACCTGC CAAAACAATT TTTAGAGCTA GGTGATCGAC CTATTTGAT	1560
TCATACAAATT GAAAATTG TCTTGGAGCC AAGTATTGAA AAAATTGTAAG TTGGTGTCA	1620
TGGAGACTGG GTTTCTCATG CAGAAGATCT TGTAGATAAA TATCTCCCTC TTTATAAGGA	1680
ACGTATCATC ATTACAAAGG GTGGTGCTGA CCGCAATACA AGTATTAAGA ACATCATTGA	1740
AGCCATTGAT GCTTATCGTC CGCTTACTCC AGAGGATATC GTTGTACCC ACGATTCTGT	1800
TCGTCCATT ATTACACTTC GCATGATTCA GGACAATATC CAACTTGCCTC AAAATCATGA	1860
CGCAGTGGAC ACAGTGGTAG AAGCGGTGA TACTATCGTT GAAAGTACCA ATGGTCAATT	1920
TATTACAGAT ATTCCAAATC GTGCTCACCT TTATCAAGGA CAAACACCTC AAACATTCCG	1980
TTGCAAGGAC TTCATGGACC TTTATGGATC TCTTCTGAT GAAGAGAAGG AAATCTTGAC	2040
AGATGCATGT AAAATCTTG TGATCAAAGG AAAAGATGTG GCTTGGCCA AAGGTGAATA	2100
CTCAAATCTG AAGATTACAA CCGTAACAGA TTTGAAGATT GCAAAAGTA TGATTGAGAA	2160
AGACTAGTAA AATGATTAAT CAAATTATC AACTAACTAA GCCTAAGTTT ATCAATGTCA	2220
AATATCAGGA AGAGGCTATT GACCAAGAGA ATCATATCCT TATCCGTCCC AACTACATGG	2280
CTGTCTGTCA TGCGGATCAG CGTTACTATC AGGGAAAACG TGATCCCAAG ATTTTGAAATA	2340
AAAAGCTTCC AATGGCAATG ATTACAGAGT CATGTGGAAC CGTCATTCT GACCCGACCG	2400

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GAACCTACGA	GGTTGGTCAA	AAAGTTGTCA	TGATTCCCAA	TCAGTCTCCT	ATGCAGAGTG	2460
ATGAAGAATT	CTATGAAAAC	TACATGACAG	GGACCCATT	CTTGTCTAGT	GGATTGATG	2520
GCTTTATGAG	AGAGTTGTT	TCTCTCCCTA	AAGATCGTGT	GGTGGCTTAT	GATGCTATTG	2580
AAGATACGGT	TGCAGCCATT	ACAGAGTTG	TCAGTGTGGG	CATGCACGCT	ATGAATCGTC	2640
TATTGACTCT	TGCTCATAGC	AAGCGGGAGC	GGATCGCCGT	TATTGGAGAT	GGAAGTTAG	2700
CTTTGTGGT	TGCCAATATT	ATCAACTATA	CTTGCCAGA	AGCAGAGATT	GTGGTTATTG	2760
GTCGTCATTG	GGAAAAGTTG	GAACTCTTCT	CATTTGCCAA	AGAATGCTAT	ATTACGGATA	2820
ATATTCCCTGA	AGATTGGCC	TTTGACCATG	CTTTGAATG	TTGTGGTGGT	GATGGTACTG	2880
GACCAGCTAT	TAATGACTTG	ATTCGCTACA	TTCGTCCTCA	GGGAACGATT	CTCATGATGG	2940
GAGTTAGCGA	ATATAAAGTC	AATCTCAATA	CTCGCGATGC	CTTAGAAAAG	GGCTTGATTT	3000
TGGTTGGGTC	ATCTCGTTCT	GGTCGCATTG	ATTTTGAAAAA	TGCTATCCAA	ATGATGGAAG	3060
TCAAGAAATT	TGCCAATCGT	CTTAAAATA	TCCTTTATCT	AGAAGAACCT	GTAAGAGAAA	3120
TTAAAGATAT	TCATCGTGT	TTTGCACCCG	ATTTAACAC	AGCCTTAAA	ACAGTGTAA	3180
AGTGGGAAGT	ATAAGTACTG	GAGGTTAATT	GTGGAGAAAA	TCATTAAGA	AAAAATTCT	3240
TCCTTACTTA	GTCAAGAAGA	GGAAGTCCTC	AGTGTGAAC	AACTGGGTGG	AATGACCAAT	3300
CAAAACTATT	TGGCCAAAAC	AACAAATAAG	CAATACATTG	TTAAATTCTT	TGGTAAAGGG	3360
ACAGAAAAGC	TTATCAATCG	ACAAGATGAA	AAGTACAATC	TTGAACTACT	AAAGGATTAA	3420
GGCTTAGATG	AAAAAAATTA	TCTTTTGAT	ATTGAAGCTG	GTATCAAAGT	AAATGAGTAT	3480
ATCGAATCTG	CGATTACGCT	TGATTCAACG	TCAATCAAGA	CCAAGTTCGA	CAAAATTACT	3540
CCAATATTAC	AAACTATTCA	TACGTCTGCT	AAGGAATTAA	GAGGAGAATT	TGCTCCTTT	3600
GAAGAAATCA	AAAAATACGA	ATCCTTGATT	GAAGAACAAA	TTCCTTATGC	CAAATATGAA	3660
TCTGTTAGAA	ATGCAGTCTT	CTCCTTAGAG	AAAAGACTGG	CTGACTTAGG	TGTTGACAGA	3720
AAATCTTGTC	ATATCGATTT	GGTGCCTGAA	AACTTTATCG	AATCACCTCA	AGGACGACTT	3780
TATTTGATG	ACTGGGAATA	TTCATCAATG	AATGATCCAA	TGTGGGATTT	GGCTGCCCTC	3840
TTTTTAGAGT	CTGAATTAC	TTCCAAGAG	GAAGAAACTT	TCTTATCTCA	CTATGAGAGT	3900
GACCAAAACAC	CGGTTCTCA	TGAAAAGATT	GCTATTATA	AAATTTACA	AGATACTATT	3960
TGGAGTCTAT	GGACTGTCTA	TAAGGAAGAG	CAAGGTGAAG	ATTTGGTGA	CTATGGTGTG	4020
AATCGTTACC	AAAGAGCTAT	TAAAGGTTG	GCTTCTTATG	GAGGTTCAAGA	TGAAAAGTAA	4080
AAACGGAGTT	CCTTTGGCC	TTCTCTCAGG	TATTTCTGG	GGCTTGGGTC	TAACGGTTAG	4140
TGCTTATATC	TTTCGATTT	TTACAGATT	GTCACCCATT	GTGGTGGCTG	CAAATCATGA	4200

817

TTTTTGAGC ATCTTATCT TACTAGCTT TCTCTGGTA AAAGAAGGGA AAGTCGCCT	4260
CTCAATTTC TTAAATATTC GCAATGTCAG TGTTATCATC GGAGCCTG TAGCAGGCC	4320
TATCGGTATG CAGGCCAATC TTTATGCAGT TAAGTATATC GGAAGTCTT TAGCTTCATC	4380
TGTATCGGCT ATTTACCCCTG CGATTCAGT TCTATTGGCT TTCTTCTTT TGAAGCACAA	4440
GATTCGAAA AATACTGTAT TTGGGATTGT CTTGATTATT GGAGGGATTA TTGCTCAGAC	4500
CTATAAGGTT GAACAGGTT ATTCTTTCTA CATTGGGATT CTTTGTGCTT TGGTTGTGC	4560
TATTGCATGG GGAAGTGAGA GTGTTCTTAG CTCTTTGCG ATGGAAAGTG AATTGAGTGA	4620
AATCGAAGCC CTCTTAATCC GTCAAGTAAC TTCGTTCTTG TCCTATCTTG TGATTGTGCT	4680
CTTCTCTCAT CAGTCATTAA CTGCAGTAGC CAATGGACAA TTGCTAGGTC TCATGATTGT	4740
TTTGCAGCC TTTGATATGA TTTCCTACTT GGCTTATTAT ATCGCTATCA ATCGCTTGCA	4800
ACCAGCCAAG GCTACAGGCT TGAACGTGAG CTATGTAGTA TGGACGGTCT TGTGTTGCAGT	4860
TGTTTCTTG GGTGACCCGC TAGATATGCT GACCATTATG ACGTCACTTG TCGTCATTGC	4920
TGGAGTTTAT ATTATTATTA AAGAATAAAG GAGATTGCG TGAAAGCCAT TATCTTAGCA	4980
CGGGGATTGG GAACTCGCTT GCGTCCTATG ACTGAAAATA CCCCTAAAGC CTTGGTTCAG	5040
GTAAATCAAAC AACCTTGAT TGAGTACCAA ATTGAGTTTC TCAAAGAAAA AGGAATCAAT	5100
GACATCATCA TCATTGTTGG TTATCTAAA GAACAATTG ATTACTGAA AGAGAAATAC	5160
GGTGTTCGTC TCGTTTCAA TGATAAATAC GCTGACTACA ATAACCTTTA CTCTCTCTAT	5220
CTTGTAAAAG AAGAATTGGC CAACAGCTAT GTTATTGATG CTGACAATTA TCTCTTTAAA	5280
AATATGTTCC GCAATGATTT GACACGTTCG ACTTATTTA GTGTTATCG TGAAGATTGT	5340
ACCAACGAAT GGTTCTGGT TTATGGAGAT GACTACAAGG TTCAAGACAT TATTGTTGAT	5400
AGCAAGGCAG GTCGCATCCT TAGTGGGTGA TCCTTCTGGG ATGCTCCAAC TGCAGAAAAG	5460
ATTGTCAGCT TTATCGACAA GGCTTATGTA AGTGGTGAAT TTGTTGATCT CTATTGGGAC	5520
AATATGGTTA AGGATAATAT CAAAGAGCTA GATGTCTATG TTGAAGAAATT AGAAGGCAAT	5580
AGCATTATG AGATCGATAG TGTCCAAGAC TATCGTAAAT TAGAAGAAAT TCTTAAAAAC	5640
GAAAATTAAA GATTCCAACA TCTGACAAAA TAGTCGGATG TTTTTGATT TTTTACGAAC	5700
TTTTACGAAT AGATAGATGA GTAGAAAAAG AAATGGAGTT ATTTATGAAA ATCACAAACT	5760
ATGAAATCTA TAAGTTAAAA AAATCAGGTT TGACCAATCA ACAGATTGTT AAAGTGCTAG	5820
AATAACGGTGA AAATGTTGAT CAGGAGCTTT TGTTGGGTGA TATTGCAGAT ATCTCAGGTT	5880
GCGTAATCC AGCCGTTTT ATGGAACGTT ATTTTCAGAT AGACGATGCG CATTGTCGA	5940

818

AAGAGTTCA AAAATTCCA TCTTCCTCTA TTTAGATGA CTGTTATCCT TGGGATTGAA	6000
GTGAAATATA TGATGCCCT GTACTTTAT TTTACAAGGG AAATCTTGAC CTCCTGAAAT	6060
TCCCGAAGGT AGCGGTCGTG GGCAGTCGTG CTTGTAGCAA ACAGGGAGCT AAGTCAGTTG	6120
AAAAAGTCAT TCAAGGCTTG GAAAATGAAC TGGTTATTGT CAGTGGTCTG GCCAAGGGCA	6180
TTGACACAGC AGCTCATATG GCAGCTCTTC AGAATGGCGG AAAAACCAATT GCAGTGATTG	6240
GAACAGGACT GGATGTGTTT TATCCTAAAG CCAATAAACG CTTGCAAGAC TACATCGGCA	6300
ATGACCATCT GGTCTAAAGT GAATATGGAC CTGGTGAACA ACCTCTGAAA TTTCATTTTC	6360
CTGCCGTAA TCGCATCATT GCTGGACTTT GTCGTGGTGT GATTGTAGCA GAGGCTAAGA	6420
TGGCTTCAGG TAGTCTCATT ACGTGTGAGC GAGCAATGGA AGAAGGACGC GATGTCCTTG	6480
CTATTCCCTGG TAGCATTAA GATGGACTAT CAGACGGTTG CCATCATTG ATTCAAGAAG	6540
GAGCAAAATT GGTCACCAGT GGGCAAGATG TTCTTGCAGA ATTTGAATTT TAAAATGAC	6600
CTAAGCTAGA ATTCTAAGAA AAAATCAATT TTAAGAGAAA ATGAACCCAA CATTCCATA	6660
ATAAAACGCA TATTAGCAAG TTTTAACAC TTGATAATAT GCGTTTTTC TAAGTGGATT	6720
AGTAGAGTAG AGGATTTTTC TCATATAATA CTCTTCGAAA ATCTCTCAA ACTACGTCAG	6780
CTTCCATCTG CAACCTCAAA ACAGTATTTT GAGCgATTC GTCAGTCTTA TCTACAACCT	6840
CAAAGCAGTG CTTTGAGCAA CCTGTGGCTA GCTTCCTAGT TTGCGCTTTG ATTTTCATTG	6900
AGTATAAGGG AAAGTATAGT GAATTGAAAT AAGATGTGAA CAACTCTATC AGGAAAGTC	6960
AATTAATTAA TAGAAATATT TTAGCAGCCA AGGTGTACTG TTATAGATTC AATTACACTA	7020
TAATTTAGTG TAATTGAGAA AGGAGAAATG ATTGTGATTG ATGTTGGCTA GGTTATGTT	7080
AATGATTCTT ACCGTCTCAA ATCTTGTCAAG TAAGGAAAAA TAAATTCTTC AAAAGTAGAG	7140
ATTACAAGGC TTGTTTAAGA AAGAATTCAA AGACCTTGAC AAATAAAAT AAAATGGTTA	7200
TTATAAAAAA TGGCTGAAA TAGATGTGAA TACTTTCGA AAATCTCTTC AAATACGTCA	7260
GCTCAGCTTT GCCTTGCTGT GTTTTGAGCA AGCTACGGTT AGCTTCCGAG TTTGATTT	7320
ATTTACTAGA AATGAAACTG ATGAGAGAGATA TCAGTAGACAA TTTGAGTCAG GATATTATGG	7380
AAAATGATAA AAAGAGCTCG TGAGATTGGC ATATCAGACT ACTAAAGTAT TGAGTTGTT	7440
AGGATTTAG CGACTAGTTA GCTGGGAAAG GAAGATATTG GTGACAAATA ATAAACTGTA	7500
TTCGTTGATA GAATTAGAA ATAAAATATA TGAAGAATTAA GAACTTCCA GAAGTGATT	7560
AGCGATTTA CTATGTGCCA TGCTTATCGC CTCTATCGGA TTAAATATGG ATTGACTCC	7620
CGTGATTATT GGAGCCATGT TAATCTCTCC TTTGATGACA CCTATTCTGG GAGTGGGGCT	7680
CTCTCTAGCT ATATTTGATT TTAAATTGTT AAGAAAATCT TTTAAAATAT TAGCTATTCA	7740

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AATTCTTGCC	AGTCTAATAG	CTTCAACACT	TTATTTTAT	CTTTCTCCCA	TTTCGTATGC	7800
TAGTTCGGAG	ATTGTTGCTA	GAACCTCTCC	GACTATTTGG	GATGTTCTCA	TTGCTTTGTT	7860
AGGAGGGATA	GCAGGTATCA	TTGGTGCTAG	GAAAAAAAGAG	AC		7902

(2) INFORMATION FOR SEQ ID NO: 113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 113:

GAAGTTGAAA	TGGCCAGCTG	ATGAGCAATA	TCGGTCATAG	AAATCTTCTC	AATCAACTTT	60
TGCGCAATT	TTTGGTGAT	AATAACGAGGA	ATTTGGTGAT	TTTTCTTGAC	GATAGAAGTT	120
TCAGCGACCA	TCATTTTGAA	ACAGTGATAG	CACTTGAAAC	GACGCTTCT	AAGTAGAATT	180
CTAGTAGGCA	TACCAGTTGT	CTCAAGGTAA	GGAATCTTAG	ACGGTTTTG	AAAGTCATAT	240
TTCTTCATT	GGTTTCCGCA	CTCAGGGCAA	GATGGGGCGT	CGTAGTCCAG	TTTGGCGATG	300
ATTTCCCTGT	GTGTATCTT	ATTGATGATG	TCTAAAATCT	GGATATTAGG	GTCTTTAATG	360
TCTAGTAATT	TTGTGATAAA	ATGTAATTGT	TCCATATGAA	TCTTTCTAAT	GAGTTGTTG	420
GTCGCTTTC	ATTATAGGTC	ATATGGGACT	TTTTTCTAC	AATAAAATAG	GCTCCATAAT	480
ATCTATAAGG	GATTTACCCA	CTACAAATAT	TATAGAGCCA	AAAATCCTT	GTTTACTAAA	540
CAAGGGATTT	TTCTTTGTC	TCTGCTCCTT	TTTGATATA	ATAGTTCTAT	GTTAAAATCA	600
GAAAACAAT	CACGTTATCA	AATGTTAAAT	GAAGAATTGT	CCTTCCTATT	GGAAGGCGAA	660
ACCAATGTTT	TGGCTAATCT	TTCCAACGCC	AGTGCTCTCA	AAAATCACG	TTTCCTTAAT	720
ACCGTATTG	CAGGCTTTA	TTTGTTCGAT	GGAAAGGAAT	TGGTTTAGG	CCCCTCCAA	780
GGAGGTGTTT	CCTGCATCCG	TATTGCACTA	GGCAAGGGTG	TTTGTGGTGA	GGCAGCTCAC	840
TTTCAGGAAA	CTGTTATTGT	TGGAGATGTG	ACGACCTATC	TCAACTATAT	TTCTTGATGAT	900
AGTCTAGCTA	AAAGTGAAT	TGTGGTGCCTG	ATGATGAAGA	ATGGTCAGTT	ACTTGGAGTT	960
CTGGATCTGG	ATTCTTCAGA	GATTGAGGAT	TACGATGCTA	TGGATCGAGA	TTATTTGGAA	1020
CAATTGTCG	CTATTTGCT	TGAAAAGACA	GCATGGGACT	TTACGATGTT	TGAGGAAAAAA	1080
TCTTAATGTA	TCAAGCACTT	TATCGAAAAT	ATAGAAGTCA	AAACTCTCC	CAGTTAGTTG	1140
GTCAAGAAGT	TGTGGCTAAG	ACTCTTAAAC	AAGCGGTGGA	GCAAGAGAAA	ATAAGTCACG	1200

820	
CTTATCTTT TTCTGGTCCT CGTGGAACGG GAAAAACCAG TGTTGCTAAA ATCTTGC	1260
AGGCTATGAA CTGTCCCAAT CAAGTGGGTG GCGAACCTTG CAATAACTGC TATATTGTC	1320
AAGCAGTGAC GGACGGTAGT TTAGAAGATG TCATTGAAAT GGATGCAGCT TCTAATAATG	1380
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ATAAGGTTTA TATCATAGAT GAGGTTCACAA TGCTGTCTAC AGGGGCTTT AATGCCCTCC	1500
TAAAGACGCT GGAAGAACCA ACACAGAATG TAGCTTTAT TTTGGCCACT ACTGAATTGC	1560
ACAAGATTCC TGCTACTATT CTATCCCGTG TGCAACGTT TGAGTTAAA TCAATTAAAGA	1620
CACAGGATAT TAAGGAACAT ATTCACTATA TCTTAGAAAA AGAAAATATC AGTTCTGAAC	1680
CAGAGGCTGT GGAAATCATT GCCAGACGGG CGGAAGGTGG AATGCGGGAC GCCTTGTCTA	1740
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AGCATTAA TAGGAAAGAC TAGCCCTCAG CTTCCAGACA AAATCAAAGC CTTTTAGGCT	3000

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GCTCGTCTAT TGTGCTAAA	7980
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AAGTCACCTT TAACAAGAAC	8040
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TGGCTTTGGA ACACGAAGCC	8160
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824	
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GAAATGGGGG TTGGTATCAA GGTGAAACC AACGGTGCTA GCGGTGTTGG AAATCAACTA	14580
ACTGCAGAACG ATATCCGTA GGCTAAAGCT ATTATCATTG CAGCAGACAA GGCGTGTGAA	14640
ATGGATCGAT TTGATGGAAA ACCATTGATC AATCGTCCAG TTGCTGACGG TATCCGTAAG	14700
ACAGAACGAGC TAATTAACCTT GGCTTTCA GGAGATACTG AAGTCTACCG TGCCGCTAAT	14760
GGTGCCTAAAG CTGCAACAGC CTCTAACGAA AAACAAAGCC TTGGTGGTGC CTTGTACAAA	14820
CACTTGATGATGATC TCAAATGTTA CCATTGTTA TCGGTGGTGG TATCATGATT	14880
GCCCTTGCCT TCTTGATTGA CGGTGCTTTG GGTGTTCCAA ATGAAAACCT TGGCAATCTT	14940
GGTTCTTACC ATGAGTTAGC TTCTATGTTA ATGAAAATTG GTGGAGCTGC CTTTGGTTG	15000
ATGCTTCCAG TCTTGCCTT TTATGTTGCC TACTCTATTG CTGAAAAACC GGGTTGGTA	15060
GCAGGTTTCG TGGCTGGTGC TATTGCCAA GAAGGTTTG CCTTTGGTAA AATTCCCTTAT	15120
GCCGCAGGTG GTGAAGAAC TTCAACTCTT GCAGGTGTCT CATCTGGTT CCTAGGTGCC	15180
CTTGGTGGTG GATTTATCGC AGGTGCCTTG GTTCTTGCCA TCAAGAAATA CGTAAAGTT	15240
CCTCGTTCAC TCGAAGGTGC TAAATCAATC CTTCTATTGC CACTTCTTGG AACAACTTG	15300
ACAGGATTG TTATGCTAGC TGTGAATATC CCAATGGCTG CAATCAACAC TGCTATGAAT	15360

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GACTTCCTAG	GCGGTCTTGG	AGGAGGTTCA	GCTGTCCTTC	TTGGTATCGT	CCTTGGTGGA	15420
ATGATGGCTG	TTGACATGGG	TGGACCAGTT	AATAAAGCAG	CTTATGTCTT	TGGTACAGGT	15480
ACGCTTGCAG	CAACTGTTTC	TTCAGGTGGT	TCTGTAGCCA	TGGCAGCAGT	TATGGCTGGA	15540
GGAATGGTGC	CACCACTTGC	AATCTTGTC	GCAACTCTTC	TTTCAAAAGA	TAAATTTACT	15600
AAGGAAGAAC	GTAACTCTGG	TTTGACAAAC	ATCATCATGG	GCTTGTCTT	TATCACTGAG	15660
GGAGCGATTG	CATTTGGTGC	CGCTGACCCA	GCTCGTGCAG	TTCCAAGCTT	CATCCTTGGT	15720
TCAGCAGTAG	CAGGTGGACT	CGTTGGTCTT	ACTGGTATCA	AACTCATGGC	GCCACACGGA	15780
GGAATCTTCG	TTATCGCCCT	TACTCAAAT	GCTCTCCTTT	ACCTCGTTTC	TGTCTGGTA	15840
GGAGCAATCG	TAAGTGGTGT	GGTTTATGGT	TACCTACGCA	AACCACAAGC	ATAAAAAAATA	15900
GAAAAATGAA	AAGATTGGAC	CGTTTGGTGC	AGTCTTTTC	TCTTCCGAA	ATGCCTGTGA	15960
AATATGGTAT	AATAGAAGAA	TGGCAAACAA	GAATACAAGT	ACAACAAGAC	GGAGACCGTC	16020
TAAAGCAGAA	CTGGAAAGAA	AAGAACGAT	TCAACGAATG	TTGATTTCGT	TAGGAATTGC	16080
GATTTTATTG	ATTTTCCGAG	CCTTCAAATT	AGGGGCTGCA	GGTATAACCC	TTTATAATTT	16140
AATTGCGTTG	CTAGTGGTA	GCCTAGCTTA	TCTGGCGATA	TTCGGCCTAT	TAATCTATCT	16200
CTTCTTTTC	AAAGTGGATAC	GAAAACAGGA	AGGACTCTTA	TCTGGCTTT	TCACCATATT	16260
TGCTGGCTTA	CTCTTGATT	TTGAGGCCTA	CTTGGTTTGG	AAATATGGTT	TGGACAAGTC	16320
CGTTCTAAA	GGGACCATGG	CTCAGGTTGT	GACAGATCTG	ACTGGTTTC	GAACGACTAG	16380
CTTTGCTGGA	GGGGGCTTGA	TCGGGGTCGC	TCTTTATATT	CCAACAGCCT	TTCTCTTTTC	16440
AAATATCGGA	ACTTACTTTA	TTGGTTCTAT	CTTGATTTA	GTGGGTTCTC	TCCTAGTCAG	16500
CCCTTGGTCT	GTTTACGATA	TTGCTGAATT	TTTCAGTAGA	GGCTTTGCCA	AATGGTGGGA	16560
AGGGCACGAG	CGTCGAAAAG	AGGAACGCTT	TGTCAAACAA	GAAGAAAAAG	CTCGCCAAA	16620
GGCTGAGAAA	GAGGCTAGAT	TAGAACAAAGA	AGAGACTGAA	AAAGCCTTAC	TCGATTTGCC	16680
TCCTGTTGAT	ATGGAAACGG	GTGAAATTCT	GACAGAGGAA	GCTGTTCAA	ATCTTCCACC	16740
TATTCCAGAA	GAAAAGTGGG	TGGAACCAGA	AATCATCCTG	CCTCAAGCTG	AACTAAATT	16800
CCCTGAACAG	GAAGATGACT	CAGATGACGA	AGATGTTCA	GTCGATTTT	CAGCCAAAGA	16860
AGCCCTTGAA	TACAAACTTC	CAAGCTTACA	ACTCTTGCA	CCAGATAAAC	CAAAGATCA	16920
GTCTAAAGAG	AAGAAAATTG	TCAGAGAAAA	TATCAAAATC	TTAGAAGCAA	CCTTGCTAG	16980
CTTTGGTATT	AAGGTAACAG	TTGAACGGGC	CGAAATTGGG	CCATCAGTGA	CCAAGTATGA	17040
AGTCAAGCCG	GCTGTTGGTG	TAAGGGTCAA	CCGCATTCC	AATCTATCAG	ATGACCTCGC	17100
TCTAGCCTTG	GCTGCCAAAG	ATGTCCGGAT	TGAAGCACCA	ATCCCTGGGA	AATCCCTAAT	17160

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CGGAATTGAA	GTGCCCAACT	CCGATATTGC	CACTGTATCT	TTCCGAGAAC	TATGGGAACA	17220
ATCGCAAACG	AAAGCAGAAA	ATTCCTTGG	AATTCCCTTA	GGGAAGGCTG	TTAATGGAAC	17280
CGCAAGAGCT	TTTGACCTT	CTAAAATGCC	CCACTGCTA	GTTGCAGGTT	CAACGGGTTC	17340
AGGGAAGTCA	GTAGCAGTTA	ACGGCATTAT	TGCTAGCATT	CTCATGAAGG	CGAGACCAGA	17400
TCAAGTTAAA	TTTATGATGG	TCGATCCCAA	GATGGTTGAG	TTATCTGTTT	ACAATGATAT	17460
TCCCCACCTC	TTGATTCCAG	TCGTGACCAA	TCCACGCAA	GCCAGCAAGG	CTCTGCAAAA	17520
GGTTGTGGAT	GAAATGGAAA	ACCGTTATGA	ACTCTTGCC	AAGGTGGGAG	TTCGGAATAT	17580
TGCAGGTTTT	AATGCCAAGG	TAGAAGAGTT	CAATTCCAG	TCTGAGTACA	AGCAAATTCC	17640
GCTACCATTC	ATTGTCGTGA	TTGTGGATGA	GTTGGCTGAC	CTCATGATGG	TGGCCAGCAA	17700
GGAAAGTGGAA	GATGCTATCA	TCCGCTTGG	GCAGAAGGCG	CGTGCTGCAG	GTATCCACAT	17760
GATTCTTGCA	ACTCAGCGTC	CATCTGTTGA	TGTCATCTCT	GGTTTGATTA	AGGCCAATGT	17820
TCCATCTCGT	GTAGCATTG	CGGTTTCATC	AGGAACAGAC	TCCCCTACGA	TTTTGGATGA	17880
AAATGGAGCA	GAAAAACTTC	TTGGTCGAGG	AGACATGCTC	TTTAAACCGA	TTGATGAAAA	17940
TCATCCAGTT	CGTCTCCAAG	GCTCCTTAT	CTCGGATGAC	GATGTTGAGC	GCATTGTGAA	18000
CTTCATCAAG	ACTCAGGCAG	ATGCAGACTA	CGATGAGAGT	TTTGATCCAG	GTGAGGTTTC	18060
TGAAAATGAA	GGAGAATT	CGGATGGAGA	TGCTGGTGGT	GATCCGCTTT	TTGAAGAAGC	18120
TAAGTCTTTG	GTTATCGAAA	CACAGAAAGC	CAGTGCGTCT	ATGATTTCAGC	GTCGTTTATC	18180
AGTTGGATTT	AACCCTGCAG	CCCGTCTCAT	GGAAGAACTG	GAGATAGCAG	GTGTCATCGG	18240
TCCAGCTGAA	GGTACCAAAAC	CTCGAAAAGT	GTTACAACAA	TAAAAAAATA	GCTTCTTCC	18300
AAGTTGGAG	GGAAAGCTATT	TTAGTGGCTA	TTGATTGCTT	TTATTTCTG	AAGTTGGCGC	18360
ATTGGACTGT	TTTTCGTTTT	CAGTAGCAGG	TTTACTTGAA	GCAGGAGTAG	AAGAGTCCCTG	18420
AGTTGCTGTT	TTCTGATCTT	CTTTTTCTC	TTCCTTGACG	CTAGATTTTG	GTGTTCCCTC	18480
TTGCTGTGTT	TTTCTTGAC	TAGTGTAGT	CTCTTTAGTT	GGACTGGTGT	TTTCCTTAGG	18540
GGATTCCCTT	TGGATTCTT	TGACAATGGT	TGTCGCTG	CTTGTGCTAG	GTTCTTTTT	18600
AATATTTTG	TTATTATCCA	AGGCAGTT				18627

(2) INFORMATION FOR SEQ ID NO: 114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 114:

TAAAATACGT	TACCTTGCTT	CTGCACGTT	AGCAGGTAAG	TCATTGAAAT	TTAAAGATCA	60
AGATATTACA	ATTGAAGAAA	CGACTGAAAC	AGCTTTGAA	GGAGTTGATA	TTGCTCTCTT	120
TTCAGCAGGT	AGTTCTACAT	CAGCTAAGTA	TGCACCATA	GCAGTAAAAG	CTGGCGTGGT	180
AGTAGTAGAT	AATACATCTT	ATTTCCGTCA	AAATCCAGAT	GTTCCTTGG	TTGTTCCAGA	240
GGTCAATGCT	CATGCACTTG	ATGCTCACAA	CGGAATCATT	GCCTGCCCTA	ATTGTTCAAC	300
AATTCAAATG	ATGGTGGCTC	TTGAGCCGGT	TCGCCAAAAA	TGGGGCTTGG	ACCGTATCAT	360
TGTTTCAACT	TATCAAGCCG	TTTCAGGTGC	TGGTATGGGA	GCAATTCTTG	AGACACAACG	420
TGAACCTCGT	GAAGTCTTGA	ATGATGGTGT	GAAACCACGT	GATTTGCATG	CGGAAATCTT	480
GCCTTCAGGT	GGTGACAAGA	AACATTATCC	TATCGCCTTT	AACGCTTTC	CACAAATTGA	540
TGTTTCACT	GATAATGATT	ACACGTACGA	AGAGATGAAG	ATGACCAAGG	AAACTAAGAA	600
AATTATGGAA	GATGATAGCA	TTGCACTATC	TGCAACATGT	GTGCGTATTC	CAGTCTTGT	660
AGCTCACTCT	GAGTCTGTTT	ATATCGAAAC	AAAAGAAGTG	GCTCCAATCG	AAGAAGTAAA	720
AGCAGCTATC	GCAGCCTTCC	CAGGTGCTGT	TCTTGAAGAT	GATGTAGCTC	ATCAAATCTA	780
TCCTCAAGCT	ATCAATGCAG	TTGGTTCGCG	TGATACCTTT	GTTGGTCGTA	TCCGTAAAGA	840
CTTGGATGCA	AAAAAAGGAA	TTCACATGTG	GGTTGTTCA	GATAACCTTC	TCAAAGGTGC	900
TGCTTGGAAC	TCAGTTCAGA	TTGCTGAAAC	TCTTCATGAA	CGTGGATTGG	TTCGTCCAAC	960
AGCCGAATTG	AAATTTGAAT	TAAAATAGTC	ATATCGTTA	GGAGTTCAGA	TGAACTCCTT	1020
CTTTGAAATA	GAGAGGTGTT	TTCGTGTCTT	ATCAAGATT	AAAAAAATGT	AAAATCATTA	1080
CAGCCTTTAT	TACCCCCCTTC	CATGAGGATG	GTTCCATTAA	CTTGATGCT	ATTCCAGCCT	1140
TGATTGAGCA	TTTATTGGCC	CATCATACGG	ATGGAATTCT	TCTCGCAGGA	ACGACTGCTG	1200
AGAGTCCAAC	TTTGACCCAC	GATGAGGAGT	TGGAGTTGTT	TGCGGCTGTA	CAAAGGTTG	1260
TCAATGGACG	CGTTCCCTTG	ATTGGGGGTG	TAGGTACTAA	TGATACGCGT	GACTCTATTG	1320
AGTTTGTCAA	AGAAGTAGCG	GAATTGGTG	GTTCGCGAGC	TGGGCTTGCT	ATTGTTCCCTT	1380
ACTACAACAA	ACCTTCTCAA	GAAGGGATGT	ATCAGCACTT	TAAGACTATT	GCAGATGCTT	1440
CTGACCTACC	AATTATTATC	TATAACATTC	CAGGGCGTGT	AGTTGTCGAA	TTGACTCCAG	1500
AAACCATGCT	TCGCTTGGCT	GACCATCCAA	ATATTATCGG	TGTCAAAGAA	TGTACTAGCT	1560
TGGCTAATAT	GGCTTACTTG	ATTGAGCACA	AGCCTGAAGA	GTTCTTGATT	TATACAGGTG	1620
AGGATGGAGA	TGCTTTCCAT	GCCATGAACC	TTGGGGCGGA	TGGGGTTATT	TCTGTTGCCT	1680

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CTCATACAAA	TGGGGATGAA	ATGCACGAGA	TGTTTACTGC	GATTGCAGAA	AGCGATATGA	1740
AGAAAGCCGC	AGCAATTCA	CGTAAATTCA	TTCCTAAGGT	TAATGCTCTC	TTCTCTTATC	1800
CAAGTCTGC	TCCAGTTAACG	GCAATTCTTA	ACTATATGGG	ATTTGAAGCT	GGACCCACTC	1860
GTCTACCTCT	TGTTCCAGCA	CCAGAAGAAG	ATGCCAACG	CATTATCAAG	GTTGTCGTAG	1920
ATGGCGACTA	CGAAGCAACT	AAGGCAACTG	TAACAGGGT	CTTAAGACCA	GATTACTAAT	1980
AAAGACAATA	AAATCCGGCT	CTTTGTCAAC	TGTAGTGGGT	TGAAGTCAGC	TAAGCTCGAG	2040
AAAGGACAAA	TTTTGTCTT	TCTTTTTGTA	TATTCAGAGC	GATAAAAATC	CGTTTTTGTA	2100
AGTTTTCAA	GTTCCGAAA	CCAAAGGCAT	TGCGCTTGAT	AAGTTTGATG	AGATTATTGG	2160
TCGCTTCCAA	TTTGGCGTTT	GAATAGGGTA	GTTGAAGGGT	GTTGACGATT	TTCTTTTGTT	2220
CCTTTAGAAA	GGTTTTAAAG	ACAGTCTGAA	AAATAGGATG	AACCTGCTTC	AGATTGTCCT	2280
CAATGAGTCC	GAAAATTTTC	TCCGGTTCCCT	TATTCTGAAA	GTGAAACACC	AAGAGTTGAT	2340
AGAGCTGATA	GTGATGTTTC	AAGTTTGATG	AATAGCTCAA	AAGCTTGTTT	AAAATCTCTT	2400
TATTGGTTAA	GTGCATACGA	AAAGTAGGAC	GATAAAAATCG	CTTATCACTC	AGTTTACGGC	2460
TATCCTGTTG	AATGAGTTTC	CAGTAGCGCT	TGATAGCCTT	GTATTGGGA	TTTCGATGA	2520
AACTGATTCA	TGATTGGAC	ACGCACACGA	CTCATAGCAC			2560

(2) INFORMATION FOR SEQ ID NO: 115:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 115:

TATTGGATTTC	CCCTTGCAAT	CAGTTTATGG	GACAAGCACC	CGGCAGCGCA	GAGGAAATCA	60
ACGCCTTCTG	TAGCCTACAT	TTTCAAACCA	CCTTCCCACG	TTTGCCAAAG	ATTAAGGTCA	120
ACGGTAAGGA	AGCAGACCCCT	CTCTATGTCT	GGTTACAAGA	CCAGAAAATCC	GGCCCACCTAG	180
GAAAACGAGT	CGAATGGAAT	TTCGCTAAGT	TTCTCATCGG	TCGAGATGGG	CAAGTCTTG	240
AACGCTTTTC	TTCAAAACAC	GACCCAAAAC	AAATTGAAGA	GGCGATACAA	ACTCTACTAT	300
AATTCAACAT	CTCACTATGA	TTAGGTTCC	TTAACCTGA	TGAATAGTGA	GATTTTTGTA	360
TGGGCTTTGA	CTTAAATAGA	AAAACACCCC	ATGATATGAA	ACATGAAGTG	TTGTAAAGTC	420
TATGTTGTAG	GTGCTTATT	CACAATTCA	ATGTGACCAG	TGATAACGAA	TACCATACAG	480

832	
AATCTTCATA TACACTAAC AAATGACTTT CTAATTATTT CAATTAGTTT TGGCTAGTAA	540
ATATCATTTC CAACAAACGC CCTCTCAATT CCTTATCCTG ATGATGCAAG ATATTCATTA	600
AGTCATGAGA GTTTTCGCA TTGATGAATT GATTTAACAA TCTATCTTT AATTCAATG	660
GAAGAGAACG TGTCTTAGT AGTCTAAAAA CTTCGTCATT TAAAGATGTC CTTTTATTAT	720
CTTTCCATTC AAATTTAGCT GTATCATTCT TATTTGGCAA TTCAATTATA GACACATTG	780
TTCCTTTAAA ATGAATTCTA TGTTTCTAT TGCTTGGAAC GATACTAGAA TCTCCTTGTA	840
ATGCTAACTC TACCATTCCC ATTTCCCAAT CGATTGATAA TCTTGTGTTA TATCTTGAC	900
CATTTTGATC TTCAAGCATT TCAAAAGAAT GTTGTGTTCC TGGGAATACA TACCAATCTA	960
CAACTTCAGG TAAATCAACA CCCATACCTA TCTCAGAACC AACCAAGGGA ATGATTGCAC	1020
CACTTTTTGC AAACACAGGC GTAGTCGAGA TGTCCCTATA AACACTTAAC TTCACACCAC	1080
CTGTGTATTT TTTCTCTGAA AAGAAGTCAT ACCATTCACTTTCAGGGAAC CATACTCTA	1140
CTTTTGCAGA TTGGAATGTC AAATCCATCT TTTCTACAAT GGGAGCCACC ATCAGTTCTG	1200
TTCCAAAAAA GTATTGGTTT GGAACATTAT AGCTCTCATC ATTCTCTGGA TAGAAATAAT	1260
AGATTGGACT GATTAATGGG GCACCTTCCT CATGTGTCG TACATTCTG GTATATAGAT	1320
AGGGAATCAT CTGATGTCCTC AAACGAAGGT ATTCTCTCATC AATCTTAGAT GTTGTGTTCTG	1380
AAAAAAACCA AGGTTCTTTA CTATTAAGGACTCTAGA ACTATGTAAT CGAGTAATCG	1440
GACTAAAAAC ACCAAACTGT AGCCATCTAG TTTGTAGCTC TTGTCATAA TCCCCAACAA	1500
TATGTCACC GATATCATGA CTCCACCAAC TATAACCGAT ATTAGATGCT GTCGCTGTAA	1560
AATAGGGTTG AAATCTTAAG GAATTCAAC TAATAATAGT ATCCCCTGAA AAACCAACAG	1620
GGTAGCGGTG ACTACCAGGA CCTGCATATC TTGATAAAAT CAAACCACCT TCTGCATTT	1680
TACAACCTATC CTGATAGTGA TAATGGTTA AAAGCCAAAG TGGATCTAGC ATACCTGTG	1740
TCCCTTGTG CCAGTCATC CACCAAAAT CTACTCCCTG CTTTTCTAGT TCATAATGAA	1800
CATCTTAAA GTAGGCTTCC CTAAAGAGG GATTAACAAAT ATCAAAATA GCAGGTTCTT	1860
CTAGTTCTAC ATTTAACCC ACCGTTTG CGATTTGAGG ATAAGCTCTC TCATAAGCCC	1920
GTATCCCATC AGCAGGATGG ACATTTAAGG AGAGTTTAG CTTCTATCA TGAAAGTTGTT	1980
GCAATAACTG TTCTGGATTG GGTATTAAGT TTCTATTCCA ACTATATCCT GTCCAGGCCAC	2040
TTCCAAAGCG AGCTGGAATG TCAGTTATAT GCCAATCCAT ATCTAACACA CCGATAGATA	2100
ATGGAATTTCCTCTA AATCTGTCTA TTAAATCCAA GTATTCATCC GACGTATAAG	2160
GCCAATATCT ACTCCACCAA TTGCCTAAAG CATACTTTGG CAACAAGGGT GTTGAACCAG	2220
TCAAATGGTA AAAATCTCTG ATTGCTCCTC TATAATCATG CCCATAGGCA AAGAAATACA	2280

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GGTCAATTTG ATTTCTCTC TCAATATAAC CAGATTGTC ATCCCAAATA AATCCTTGAG	2340
AATCATCCAA TAAGGCTATA CCATTCGGC TAATAATTCC ATCTTCTAAC GAGATTGCTC	2400
CATCTGCCTT ATCCAGAGTC CGAGCTGTT CTTTTAACGT TTCAATAGAT TCACCAAAAT	2460
ACCAGCGACT ACCATATACG GCAAAATTTC CTTTTAATTC TATAAATAAA TTTTCGGCGT	2520
TAAATTCTCC TTTATTAAAG TGCAGATGAA AATAGTCCGT CATAATATCT AGTACGTTG	2580
ATGTCCTCGAT ATAATCTAAC GAAATTTGGC CAAAATCTCT ATTATAGATA AGTTGTGTCG	2640
TTCTATCCTC AAAACTCCA GTTTGAGAGT ATTCTAACCT TACTAGCTG TCTGTTAATA	2700
CAGAGATTG ATAAAACCT CCCTAAAAA TTTTCAATTG GTTTCCCTC TTTTATGGTA	2760
GCATAAAAAG AGAACGCACC ATTTTGATG CGTTTTCAT TATTCTGAAT GCAATGTTCT	2820
ATCTGTTATA TCTATGACAA ATAATAGTCA ATTGAAAAAA TGCAGTGGAC AAAATATCTT	2880
TTAACAAACC AAGAGTTTAAAGAGTTA TCACCTTCA ACTTTTCTAA GCTTATGCAG	2940
TTGTAACAAACA AACTACTTTTAAACTATTAA CTAAGATAGG ATTGATAAAT AATTCAAAAC	3000
TCTTACTAGC AATCATAACGA TATTCAAGCT CACGTGCTT TTTCCCTCCT GCTTATTCT	3060
TAGAACTGAA GAACCCGGAT CGGTATATAA ATTATCCGGA TCAACATAGT CATAAGATTC	3120
ATAACAGTTG CGCTTCATTA AGTCATCCCC AGAGCAAGAG CTTCATCTCG TAATTTTCA	3180
ACATCACTAA CCGTAGGTCG CCATCCTTCA ATCATATTG TACTTAAAGC ATACCAAACA	3240
CTCTTAAAAA CGGATCGGTT TTCAAAAGCT ATTCCCATGA TTGTCATCTT TTCTTATCT	3300
ATATCTAAGG ACATATGCTA CCTCCTTAG ATACATTATA CCATGTTCT CTGTAGCTT	3360
TAAAAATTGTTT ATTGTTGTTG TCATATCTAA GTTTCAGCA CGCTTATCCT ATTTTATAAG	3420
CCTCAAACCC AAATATAAA CGCATTCTT TTGCTTTTT ACTATTGTAT CGTATTCTAC	3480
GATAACATAC TTACTTTAT GTTTTTTTA AATAACAGCA GTTCCCTGTT TATCAACTAT	3540
TCGAACTACT TTCTATTTG CTTCATACCC TACATAGCGA AAAATATGA AAAAGCAGAG	3600
AAGAATATCT TAAAAAGACC TCTTCACTGC TAATATTAAC ACTCATTATT TAAACTATAT	3660
GGATTCTATC ATCGAGTATA CTTTTTACT TATTAGATAC CTTGCTCTTC TTTCACCAAT	3720
TTTTGATCAT ATACACGGAT GAATGGAAGA TAGACTAGGA ATGCTGAAA TGACACTACT	3780
AGAGCAACTA ATACAGCTCG AAGATCTGCT GTCCTAAAGA AAGCTCCAAT CCCTACTGGA	3840
GTTGGCCATG GAACCTGTGC GATAATTGGC TTAATAAGT TTAGAGAATT CGCTACGTAA	3900
TAAATAGTAG CAGTAACCAT TGGTGCTAAA ATAAATGGTA TAGCCAAGGC TGGATTATAG	3960
ATAATAGGTA ATCCAAAAAT TAATGGTTCA TTAATATTAA ATAAGGCTGG AACTACAGAT	4020

834	
GCTCGTCCTA TTGCTTAAG CTGTCAGAT TTAGAGGCAA AAGCAATATA TAAACATAGT	4080
CCTAAAGTTG CACCAGAACC ACCTGCAATT ACAAACATAT TAGAAAATTC ACCTGCAACA	4140
GCGAAGTGCC CGCCAGCAGC ATTTTCAGCC ATGTTAGCAA GAGCAATTGG ACTAACAAAT	4200
GCAAAACAA TGTCGACC GTGGATACCT ACAATCCAAA GTAGTTGAGT CAATAGATAA	4260
ATAATCATTA AACCAATCCA CGAATTAGTC AGATTGGATA CAAAACAAA TGGAATTGCA	4320
ATGACTTTAA AAATATCTGT TCCCATTGCT ACAAGAAGAC CGTTGATAAA GATAACAAACA	4380
AATGCAACAA CAAATCCCGG AACCAAAGCG GTAAATCCAC GAGAAACTCC TTCTGGAACA	4440
GCTTCAGGCA TTTTAATAAC CCAATTATGT TTAACACACA TACGATAAAAT AAGAACAGTC	4500
ACAATTGCCA TAATGATTGC GGTAAAATC CCTGTTGTCC CAAAACGTGC GACTACATTT	4560
CCCATTGCCC ATCCATCTGC AATTACTGCA CCTTCTTTA GACTTGTAC AGTCTTCATC	4620
ATTCCACCAT CAAAATGAT TTGCGGTACT GTCATGACAA AAGCCATCAA GGCAAGCAAG	4680
GCACCATTAA GAGGATTCAT ATTGAGTTCT TCTTCCTCTG CATAAATTTC TGTCAATTCA	4740
TATGCAAGTG ATAGAACGAA ATAAAGAGAT AGAGAACCCA TAGTCGCATA GTTGCAACC	4800
ATGTAAAGTG ATGTGAATTTC ATCAAATGAA GCAGAGAAAA TATCTGCCAC AATTGCCAA	4860
AATGAGAAAG CTTGTGGCAA AATACTGAAT ACCAAAAACA TTGATCCTAC AATAGTAAAT	4920
GGTACAGCAG CCATACCTGC AGCCGTGATA GCACGTACTA CTTTAAACTG AGCAAGTTG	4980
CCCATTGGTC CCATAACATG GTTTCAAGA AAACCAAACA ACCCGTTTG TTGATCCATA	5040
AATAGACCTC CTTAATAAAAA CATAATAATT TTTACTTTCT AAAGACTAGT TTCAAAATACA	5100
AATTATACTA GATCAGGATT ATAAACTAAG TGAGTTCTTT TCCAATTGGA CAAATTGTTG	5160
ATAAGCCTTA TCTGTTCGTT TATAAATTTC TTTAATTCTT CTAATGTCTA ACAAACTCAG	5220
AACTAAACCT AATAGAAGAA CTACAAAAAC AAATAAACGT GCTACTTGGT TATTTCAAA	5280
AATCGGAAAA AGATTCTTAA ACCAACTGT CCAAGTTAAA ACAAGTAATC CTATTGAAAT	5340
AAGCATTGTT ATTCTAACAA ACATTAGTGT TATTCCCAAC TTTCTTCC TATTCCATA	5400
AAGTTTAAAT TGTCACACAG TTGCTAAAAT AGAAAATACT ATGAGCATAA TGGGGAAAAT	5460
AATAATAGGC GAGGGACTAA TAAACTGACT CAAAAGCCAA TAAATATTCC CAAAAAAGAA	5520
GAGTGCTATT GAATAACGTA GAAGAAGATA TCGATTGAAA AAAGTATTAG TTAGAGCCAT	5580
CTCTCGACGT TGTTGTTCAA TCTTTGTCG TTCTTTTTA TCCATATCAT TTCTCCTTA	5640
TATAACAACA CATATTTAGT TAACTTTCTT ATAAAGAGCT AACATTCCT TTGCTACTTC	5700
TAATAATGTC ATAGTGGTCA TTAATGATC TTGAGCATGT ACCATGATAA TTTCAATTTC	5760
AATTCCACT CCACTTGCGT ATTCTGCAA GAGTTGGTT TGTGCATGAT GCGCTTCAAG	5820

AATTATCTCA	TTTGATTGAT	TTAATTTACT	TTCTGCATCA	TCAAAACTAC	CTTCTCTCAT	5880
TTTTGCAAAT	GCTTCATGTA	TTTCTGACCT	TGCATTTCCC	GAATGCAGGA	TAATTTCAA	5940
TGCTGCAACC	TGCAGTTCCCT	CTTGATTCAT	ATAAACCTCC	TATTTTATCT	TCTCAAATAT	6000
GTAAATAAAA	TCTTCAAAGT	TATTGCAAGA	TATTAGCTGA	TTTGCAATT	CATCATTCTC	6060
TGTCAGAGAG	ACTATCTTT	TAGTCACAGT	TGCCAAACCT	TCGTTCCCAT	ATATTGATGG	6120
AGATAGAAGA	AATACTAGCT	GGACATGTGA	ACTTGATTA	TCCCAGAGTA	ACGAATCTT	6180
ACAAATTGCA	ACCGAAACCT	TTCCCTCTGT	ACCAAAGGGC	TGAATAGGAT	GCGGAACTGC	6240
AATTTTTCA	GAAAAACAA	CTGAACTTAA	TTCTTCGCGC	TGTTTAATTC	CATAAAGTAA	6300
AGATTGTTCA	AACTCATTG	ATTCACCAAC	AGATAAACTC	TCAACCATCT	TTTCAAGTAA	6360
ATTTACCTTG	TCTGATTCA	TACATATTAA	AAAGTTTCT	TTACTAAAAT	ACTGTCTAAA	6420
GCCGTTGTTT	TCAAATTG	TAATCTTG	TGATTGTACA	TAACTAGAAA	CTTGCATCTA	6480
ATCCATAGCT	TTTCTAAATCA	TTTCCATCTC	ATCACTCTTA	AGAAACACAC	TAACTTAAA	6540
AACTGGGATT	TGAAATATA	GATTGATAA	ATCAATAGCT	GACACTATAA	AATCTATTCC	6600
TTTAAGTTTT	TCTTGATTCA	ATTCATAGTA	GCCTATTACA	TCAACAACTT	CTACTCGCTT	6660
CCCAAACCTCC	GTTTCCAAAC	GATTCTTAA	CATTTGGGCT	GCACCAAATC	CTGTTGCACA	6720
AATAGCAAGA	ATATTAAACT	TAGTACTCTC	TTTGCTACGT	TCCATAGCAG	CTAAAAGTG	6780
AAGACTTACA	TATGCTACTT	CATCATCTGA	TATTGTCCAC	TCCAAGAACT	TGTCCATATT	6840
TGCAAGAATT	TCTCTAGTC	TAAAGAATAT	ATCACTATAA	TTCTGTTAA	TTTCATCTAC	6900
CAAAGGGTTA	TTTAAGGTA	TCCGGCTTTC	AAACGTACT	TGTAGTGTCA	TTAGATGAGT	6960
TATCAATCCT	TCAATTAGTT	GGAAATCTGA	AGAAAAGTTA	TACATATCAT	CTAACCTAA	7020
ATTCTGAAAT	GTTTTAAATA	AAGATTTTT	AAAAACTTCT	TCAGAAATAT	TCTTCTGATT	7080
TTTTTGACAT	TGTTGACTCT	TAGCTAACAA	ATGCAAAGTA	ATGTAGTCTA	TTTCCTGAAC	7140
TGGAAATTCC	TGATTGTTA	CTTCTCTTAC	TTAGAAAGA	ATTCTTGAGG	CAACCTTCT	7200
CTCTATTGCA	TCATCAGTC	TCTGACAGTC	TATATTTTT	ATTCAAATC	CGGATTTAA	7260
ACGAATCACA	GACAATGCTA	TGTGAACATAC	AAATTCTGT	AGTACAAAT	CAGATAGTT	7320
TAGGTTGGCC	TCTTGGCATT	CATCCAAAAC	AAATTCTAGCA	AATTCTCTA	ATGGAACAGT	7380
TTGATCAAAA	AAGTTAAATT	TTACATAGCA	ATGTATTGTT	TTAAAAAAATT	GATTCTCTAG	7440
GAAATAATT	ATGATAAAAC	GTCTTTATC	ACGTTCCCTCG	CCTGAGACAT	AAACTCCTTT	7500
ATTGCCCTA	CTCTCAATGG	ACAAATTATA	CTCTGATAAC	ATCACTCGTA	TCTTCTGAA	7560

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ATCATGAGAT	AATGTTGAAC	GACTAACGTA	AAAGTTCATCA	GCTAAATCAT	CAAAAAGAAC	7620
TGGAACTTGC	TCAAATAATA	ATTTATTAA	GATAAATACT	AAACGATCAT	CACCTTTGA	7680
AACCGCAGTT	TTCGTATACT	CTTCTTCCAG	TTCATAAAGTT	TGTCTAAACT	CCTGGTAAGC	7740
GCCTTGATTC	TCAAAAAATA	TTTGATACCC	TTGACCTTGT	TTGAAATCA	ACCGGACTCC	7800
TTGAATAATC	ATTGTCTTCT	CAATTAATT	CAGTACATTA	CGGACAGTTC	TATCTGAACA	7860
GGATAAATAT	TCTGCCAGTT	CTTTGCTTGT	AAACAAACGT	TCCTTATT	TTATTAAAAA	7920
TTGAAGGATA	TCTTTCTCTT	TAATGTTAA	CACATTCA	CCCTCCTAAA	ACGTATGTTT	7980
TCATATATTG	AAGCATATTA	TACACTTAA	TCAGTTATA	TCAAACCTAA	AAACAATTAT	8040
CTTAACCTAA	ATATTATTG	ACATTTCATG	TGTTCATCAA	ATATTCTCAA	GAATCAAATT	8100
AGCCATTTTT	TCAATTCCCA	TTGGAATAGG	AAATAGGCT	TGAGGAGGTA	TTTGTACAAC	8160
TGGTTTCCCT	GCTT TAGAAC	CAGCCTCTTC	AAATTGCTTA	AAAGTACATT	TTGTTGAGG	8220
ACTGACAAGA	TACAAATCAA	AAGCTGCTGC	TGCGATAGCT	TTCCCTCCTT	CAGTAGCACT	8280
AATAGCATCA	ACTACAATAT	CTTCCCTTT	TCCTTTAGA	AACTCTGTG	TTTTCTGTGC	8340
CATAAGTGAT	GAAGACATTC	CTGCTGCACA	ATAAATTAAA	GCTTTTGCCA	TAATATTTC	8400
TCCTTTCTT	AAATCCAATC	AAAGCTGTGC	TAAGTTGGCT	TATTTGTTAT	CTATTTTAT	8460
TATAAAATAA	AGCGTTCCA	ATGACAATTC	CCTCATTTC	CTAAATGATA	TGGAAAAAAA	8520
TTATTATAC	TTCAATTAT	AAAATAAAAT	TATTCCTGAG	AGTAGAAATG	AAACACTATT	8580
TGCTAAAATC	AAAGGCAAGT	CTCCTATACG	AATACCATGA	GCAAGGCCACA	ATGCAATACC	8640
AATAACTTGC	ATAACATACA	TACCTAGAGC	AATAGATCCT	GTGTCCTTG	TCTTAACTAC	8700
ACGAAAAACT	TGTGGAAAAA	ATGCAAATGT	TGTTAAAATT	GCTGCAATAC	TTCCAATCAT	8760
ATGTCACCTC	AATATGCTAA	ACAAACTGAG	AATAATCTCA	GTTTGTAT	ACTATTCTAC	8820
TGATTCCACCG	TTAGATGAAA	TAACCTCCTT	ATACCAGCCA	AAAGATTTT	TCGGGGAACG	8880
ATTATAACTT	CCCTTCCCAT	TATCATCTT	ATCTACATAA	ATAAAGCCAT	AACGTTCCG	8940
CATTTCACCG	GTACCAGCTG	AAACCAAATC	AATACATCCC	CATGGAGTAT	AACCCATTAA	9000
ATCAACACCA	TCTTCAACTA	CAGCCTTTT	CATTTCACGA	ATATGGGCAC	CTAGATATTC	9060
AATTCTATAA	TCATCATGTA	CCATACCATC	TGCTGCAACT	TGATCTATAG	CTCCAAAACC	9120
ATTTTCAACA	ATAAAGAGTG	GTAAGTGATA	GTGGTCTGTA	AAACCAATT	ACGCATAACG	9180
CAAACCTTCT	GGATCAATT	GCCACTCCCA	TTCAAGAAGCC	TTAACATAAT	TATTTTCAC	9240
TAAATCTTCT	GTTTCAAGAT	AATCAAATA	AGGATTATTT	TCACGATGAG	AGTCGATAGC	9300
AAAGGACATA	TAGTAACTGA	AACCAATGTA	ATCTACAGTC	CCACCAAGTA	AATCTCTTT	9360

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ATCCTGGGCA	GTAAAATCAA	CTGAAATACC	TTTCGTTCC	CAATACTTGA	AAATATGCTC	9420
AGGATATTTA	CCTAAAACAT	GCACATCAGC	AAAATAATAA	CGCTTCTGCA	TAGTTTCAT	9480
TGCCATTAAG	ATATCCTTAG	GATTGCAAGT	AACTGGATAA	ATTGGACACA	TCGCAATCAT	9540
ACAACCTATT	TGAAAATCTG	GATTAATCTC	ATGACCAATT	TTTACAGCTC	GTGCAGAAGC	9600
AACTAATTG	TAATGTGCTG	CTTGATACAT	AATTGCTTCT	CTATTATCAC	CTTCCTCATA	9660
TACAATACCT	GAGTTAGTAA	ATGGTGCAAA	ATCTTCCTGA	TAATTGCTT	GATTATTGAT	9720
TTCATTGAAA	GTCATCCAAT	ATTTAACCTT	ATCTTTGTAA	CGTTTAAATA	CGACTTCTGC	9780
AAAACGAGCA	AAGAAATCAA	TCAATTTCCT	ATTTTCCAA	CCACCATATT	CGGTCACTAA	9840
GTGATAAGGC	ATTTCAAAAT	GAGATAGAGT	GATGACAGGT	TCAATACCAT	TCTTTAAGCA	9900
TTCATCAAAA	AGATTATCAT	AAAACGTAA	TCCTTCTTCA	TTCGGCTCTA	ACTCATCACC	9960
TTTTGGAAAG	ATACGGTGC	ATGCAATAGA	GGTACGGAAG	CACTTGAATC	CCATTTCAGC	10020
AAAAAGTGC	ATATCTTCTT	TATAACGGTG	ATAAAAATCT	ATCGCCTCAT	GATTTGGATA	10080
ATATTTACCC	TCTAAAACTC	CCAAAGTAAT	TTCACGAGCT	ACTCCATGAC	GACCAGCAGT	10140
CATAACATCA	GCAACACTAA	TTCCCTTGCC	ACCTTCTTGC	CATCCACCTT	CAAGTTGATG	10200
AGCAGCAACA	GCACCACCCC	ATAAAAATCC	ATCTTTAAA	GTAGTCATCT	TTTTCCCTCC	10260
TGACTTTGAT	ACTCTTATT	TAAACCTTAA	ACCAAAAGAT	AAAAACGCAT	TCTTTTTCCCT	10320
TATTGTTAAG	GAAAGAAGTA	ATTTTAATG	GAAATAGAAC	AATATCTTCT	TGTATTCTCG	10380
TAATGATATC	TTTACGATTT	TCAATACTTT	CAAAC TACAA	AAACTCTCAC	AATAATTCTA	10440
ATTCCTGTG	TCTATAAACG	ACTTATCGCT	TTCTGGCATC	CCAGAACAT	CTTCTATATA	10500
ACGTTCAACT	TGCATCTGCA	AGTGATATT	TTTTCTTAAA	TCTAAGATT	TCTGCATTGT	10560
CTTGATGTA	TAATGTTAT	CTAAAGTTTC	TTGATTTATC	CACTGATCAA	TAAGGAGAAT	10620
AGTCCCTCT	TTTCAATTG	GTAAAAAATA	TTCGTATTTC	AAGTACCTT	TTGATTTCT	10680
AATTTCTTA	ACAAGGCCAC	TATCAAGCAT	TTCTCTTGCA	AACTTTATTG	CACTATCTCC	10740
ATCACCTTA	TAATATACAT	GAATAGTCAA	TGTCATCTTA	TATCCTCCAA	AATCATCCTT	10800
CAATTAAA	AAAACAAGTT	TAGATGAGGA	TCTAAACTTG	TTTTTATGA	ACTAATTATC	10860
TAACGTTTCG	CCATTACTTT	CAATCACTTC	TTTATACCAA	AAAATGATT	TTTTCTTATA	10920
GCGATTATA	GTCAATTGAA	ACAAGAGCAG	GACAAAAGAG	CCTCATAAAA	GGTATTGCAA	10980
CTTGGTAATA	CCTTTTGAG	GTGCTTTTG	ATATGAGCCC	ATGTTTCTC	AATAGGATTG	11040
TACTCAGGTG	AGTAGGGAGG	AAGAGGTAAA	AGTTTATACC	CAAACCTTTC	ACACAAGAGT	11100

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TCTAGCTTCC CCATTCATG GAATCTTGC A TTATCCATAA TAATAACCGA TGGTGTGGTT	11160
AATGTTGGTA AGAGAAACTT CTGAAACCAA GCTTCAAAAA AGTCGCTCGT CATCGTCTCT	11220
TCGTAAGTCA TTGGAGCGAT TAACTCACCA TTTGTTAGAC CTGCAACCAA AGAAATCCTC	11280
TGATATCTTC TTCCAGATAC TTT	11303

(2) INFORMATION FOR SEQ ID NO: 116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 116:

CCTTAGAGATT CCACCTGCCA GAGGAATTGA TTGCCAAAC GCCCCTGAA AAACGTGATG	60
CCTCCAAACT CCTCATCGTC AACCGTGAGA CAGGAGAAAT GCAAGATAAA CATTTCCACT	120
CTATTATTGA TATGCTGGAA CCTGGTGATG CCCTTGTCAT GAACGACACC CGAGTTCTCC	180
CTGCCCGCCT CTATGGTCAA AAAGTGGAGA CAGGAGGTCA TGTGGAACCTT CTCCCTCTTA	240
AGAACACTAG TGGAGACGAG TGGGAAGTTC TGGCTAAACC TGCCAAACGC CTCAAGGTG	300
GTACTCGTAT CAGCTTGTT GATGGCCGCC TCAGCGCTGT CGTTACAGAA GAATTGACCC	360
ACGGGGGACG CATTGTCGC TTTGAATACC AAGGAATTTC CCTAGAAGTC TTGGAAAGTC	420
TGGGAGAAAT GCCTCTGCCA CCTTATATCC ACGAAAAATT AGATGACCGT GAACGTTATC	480
AAACCGTCTA CGCCAAGGAA AGTGGCTCTG CTGCAGCACC GACTGCTGGT CTTCACTTCA	540
CCAAAGAACT GCTGGCAGAA ATCCAAGCTA AGGGTGTCA TCTAGTCTAT CTGACTCTCC	600
ATGTCGGACT CGGAACCTTT AGACCTGTTT CTGTGGATAA TCTGGACGAA CACGAAATGC	660
ACTCAGAGTT CTATCAAATT TCTGAGGAAG CTGCTGCCAC CCTTCGCTCT GTCAAAAAAA	720
ATGGTGGTCG TGTCATCGCT GTCGGAACCA CTTCTATCCG CACCTTGGAA ACTATTGGTT	780
CCAAGTTGTA TGGGAAATC CAAGCAGATT CTGGTTGGAC CAATATCTT ATCAAACCTG	840
GGTATGAGTG GAAGGTCGTG GATGCCTTCT CAACCAACTT CCACCTGCCA AAATCAACTC	900
TGGTCATGTT GGTTCTGCC TTTGCAGGCC GTGAATTAGT CTTAGATGCC TACCACCATT	960
CCATCCAAGA ACACATACCGC TTCTTCAGTT TTGGTGACGC CATGTTTATT TATTGAGAAA	1020
GAATTCTCT AAATCTCTA ATACCAATAA ATCGCTAAGA TATTATTC AAGAACATCT	1080
ACAATTGAAA CTCTAGCTAG CTGTAGAAGA GGCCTAGTAC ATTGAAATTA AAATGCTTCC	1140
CCCTAGCTTC GAAAATATTG CCATAGATTG CGTTGACTCT CCAAATTGAT TCATCTATAT	1200

TTTATTTCAG CTTCTTAC	TTTCTTCGCT GTTGAAAT CAAATGCAA GACACATGAG	1260
TAGCACCATA TTTGTTACTC	TTATCTGTCC TCTCAAGAGA CTATTATGAG TTATTCAGA	1320
ATCATTCACT ACTTGACCC	TGACTCTCCT TAGTCTCAA ATCAAAGACT TATACTCTC	1380
AAAAATCTCT	TCAAACCGCG TCAACGTCAC CTTGGATTAT ATATGTGatC TGaCTTCGTC	1440
AGTTCTATCT	ACAAACCTCAA AGCAGTACTT TGAGCAACCT GCGACTAGTT TTCTAGTTG	1500
CTCTTGATT TTCATTGAGT	ATTAAACAAA AAGTGAACAA ATCTGAATTC TAATGTACAG	1560
AAGACTAGGC TTGTTCACTT	TTTTATAGTC GCTATAAGAT GACCTTATCT ATAGCTTTT	1620
ATATATAATT ATATATTCA	ACATACTATT ATCAATTTCG TCGCAGGGAG GAATCTGTTA	1680
ACGCACCCAT TCACCATTAT	CATTGACTCT ATAGCCATCT ATACTTGTAT TGACCGCTAA	1740
CTCACCCGAT GTATTACAT	AATACCATT ACCACCAACT TGGAACCATT GATTGACTTT	1800
CATAGAACCG TTGCTGTTGA	GGTAGTACCA TGAACATTAA ACTTGTACCC AACCTGTTGC	1860
CATGGAACCA TCAGTATTAT	AAAAATACCA CATAACCAATT TCTTGTTCG AGTCTGTTGT	1920
TGGAGCAACT GCTTAGCTG	GTTCTACTGC TACATCTGTT CCTTGGTTAG ATGTAACAGA	1980
TACAGGATAC GAAGGAATAG	ATGATTGCTC AGGAACAACA ACTTTTCAG GTTCTCTCGT	2040
CCCTCTCCTT ATACGTCTT	TTACCATCTC TTTAGTAATT TGACGAGAAAG TAGTTCTTC	2100
AATTGTTCCA TCACGTTCAT	CTACAGTATA GATTGTAGTA AGAGTAATT ACCAATTCT	2160
CCTACTCTT CTACTTCTTG	ACTTTTATCA AGAGTTGGCC CATCGAGATA TTCTGTTCG	2220
ATTGGAATT CTTGGACAAG	AACTTGGGGC TTGGTTCTTT TTTAACAAAC TCTTGTTCG	2280
GAGTCTTTT TTTGACTTAA	AGTACTCTCA GTTACTTGTC CACTCTTCC ATCTACATTA	2340
TAAGTTATCG TTGTAACTGT	TTTCCCATTC TTTCTAGAG TAATCTCTTG CTCTGTCCT	2400
GCAGAAAGGT CATTGCTG	TTCATATTAA GTAGCAAATG GAACAAGAAC TTCTTCAACC	2460
TTGCTTTAG CTGAACTTT	GATAACTGTA TCCGTGGCTT CTTTCTATC AACAGTAACC	2520
TGTCGGTAA CATAACCAAGT	CTCTGGATTA ACATCGTAGG TCCTTGTGCGT AGTTACATAG	2580
CCATCCTCTC CATCAATTGT	AACAGGATTT TCACTACGGT CTTTGTTCGTT ATCTTTTCA	2640
TAACGAATTC GCGTACTTGA	AATTTCTTG GTTACTACCT TAGGTTTAGT CGCTACTTT	2700
ACAATAATAT CCCCATTGTC	AGCGTCATCA TACTCTATTC CCTCTCTTT ATCTCTAGTA	2760
TCATCTCTGA CATATTGAAT	CCCATCAGCA GCATGAACAA AACTTGTATT CAGATTCTC	2820
CTAAAAATAA AGTAGCCCG	ATTACCGCAG AACCAAAAT CTTCCGAGT TTACGTATTG	2880
CATAGCGCTT ATTAGTATTA	GATTTGCCA TTACATCCTA CTTCTAGTAT AGCATCTTT	2940

CTATCAAACG TTAAACAATA TACGTTATAT ATAAAATAGA CTTAGAATGA TATATTGATT	840	3000
ATTGAACTAA CACTTTAACT ATATCGTAAT CAATCTCATA TATAAAGGAT TGCAGACATC		3060
TTATCTAAAT ACATGCGAAT ATATTTAGAT ACAAACATTC CAACTTGATA AT		3112

(2) INFORMATION FOR SEQ ID NO: 117:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 117:

CCCAAAAATC TCTTCAAACC ACGTCAGCTT CGCCTTGCCG TAGTATGGTT ACTGACTTCG	60
TCAGTTCTAT CCACAAACCTC AAAACAGTGT TTTGAGGCATC ATGCgGCTAG CTTCTTAGTT	120
TGCTCTTGA TTTTCATTGA GTATAAAAAC AGATGAGTTT CTGTTTCTT TTTATGGACT	180
ATAAAATGTTC AGCTGAAACT ACTTTCAAGG ACATTATTAT ATAAAAGAAC TTTTGAAAC	240
TAAAATCTAC TATATTACAC TATATTGAAA GCGTTTAAA AATGAGGTAT AATAAATTAA	300
CTAACGCTTA TAAAAAGTGA TAGAATCTAT TTTTATGTAT ATTTAAAGAT AGATTGCTGT	360
AAAAATAGTA GTAGCTATGC GAAATAACAG ATAGAGAGAA GGGATTGAAG CTTAGAAAAG	420
GGGAATAATA TGATATTAA GGCATTCAAG ACAAAAAAGC AGAGAAAAAG ACAAGTTGAA	480
CTACTTTGA CAGTTTTTT CGACAGTTT CTGATTGATT TATTCTTCA CTTATTGGG	540
ATTGTCCCCCT TTAAGCTGGA TAAGATTCTG ATTGTGAGCT TGATTATATT TCCCATTATT	600
TCTACAAGTA TTTATGCTTA TGAAAAGCTA TTTGAAAAAG TGTCGATAA GGATTGAGCA	660
GGAAGTATGG TGTAAATAGC ATAGGCTGAT GTCCATCATT TGCTTATAAA GAGATATTTT	720
AGTTTAATTG CAGCGGTGTC CTGGTAGATA AACTAGATTG GCAGGAGTCT GATTGGAGAA	780
AGGAGAGGGG AAAATTGGCA CCAATTGAG ATAGTTGTT TAGTTCATTT TTGTCATTTA	840
AATGAACTGT AGTAAAAGAA AGTTAATAAA AGACAAACTA AGTGCATTCTT CTGGAGTAAA	900
TGTCTTATTG CAGAAATCGG GATATAGATA TAGAGAGGAT CAGTATGAAT CGGAGTGTTC	960
AAGAACGTAAGTGTAGTAA GTGTCGTTAT AGCATTAGGA AACTATCGGT AGGAGCGGTT TCTATGATTG	1020
TAGGAGCAGT GGTATTTGGA ACGTCCTCCTG TTTTAGCTCA AGAAGGGCA AGTGAGCAAC	1080
CTCTGGCAAA TGAAACTCAA CTTTCGGGGG AGAGCTCAAC CCTAACTGAT ACAGAAAAGA	1140
GCCAGCCTTC TTCAGAGACT GAACTTTCTG GCAATAAGCA AGAACAAAGAA AGGAAAGATA	1200
AGCAAGAAGA AAAAATTCCA AGAGATTACT ATGCACGAGA TTTGGAAAAT GTCGAAACAG	1260

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TGATAGAAAA AGAAGATGTT GAAACCAATG CTTCAAATGG TCAGAGAGTT GATTTATCAA	1320
GTGAACTAGA TAAACTAAAG AAACTTGAAA ACGCAACAGT TCACATGGAG TTTAAGCCAG	1380
ATGCCAAGGC CCCAGCATTC TATAATCTCT TTTCTGTGTC AAGTGCTACT AAAAAAGATG	1440
AGTACTTCAC TATGGCAGTT TACAATAATA CTGCTACTCT AGAGGGCGT GGTCGGATG	1500
GGAAACAGTT TTACAATAAT TACAACGATG CACCCCTAAA AGTTAAACCA GGTCAGTGGA	1560
ATTCTGTGAC TTTCACAGTT GAAAAACCGA CAGCAGAACT ACCTAAAGGC CGAGTCCGCC	1620
TCTACGTAAA CGGGGTATTA TCTCGAACAA GTCTGAGATC TGGCAATTTC ATTAAAGATA	1680
TGCCAGATGT AACGCATGTG CAAATCGGAG CAACCAAGCG TGCCAACAAT ACGGTTGGG	1740
GGTCAAATCT ACAGATTCGG AATCTCACTG TGTATAATCG TGCTTAACA CCAGAAGAGG	1800
TACAAAAACG TAGTCAACTT TTTAACGCT CAGATTAGA AAAAAAACTA CCTGAAGGAG	1860
CGGCTTTAAC AGAGAAAACG GACATATTG AAAGCGGGCG TAACGGTAAC CCAAATAAAG	1920
ATGGAATCAA GAGTTATCGT ATTCCAGCAC TTCTCAAGAC AGATAAAAGGA ACTTTGATCG	1980
CAGGTGCAGA TGAACGCCGT CTCCATTGCA GTGACTGGGG TGATATCGGT ATGGTCATCA	2040
GACGTAGTGA AGATAATGGT AAAACTGGG GTGACCGAGT AACCATTACC AACTTACGTG	2100
ACAATCCAAA AGCTTCTGAC CCATCGATCG GTTCACCAGT GAATATCGAT ATGGTGTGG	2160
TTCAAGATCC TGAAACCAA CGAATCTTTT CTATCTATGA CATGTTCCA GAAGGGAAGG	2220
GAATCTTGG AATGTCTTCA CAAAAAGAAG AAGCCTACAA AAAAATCGAT GGAAAACCT	2280
ATCAAATCCT CTACCGTGAA GGAGAAAAGG GAGCTTATAC CATTGAGAA AATGGTACTG	2340
TCTATACACC AGATGGTAAG GCGACAGACT ATCGCGTTGT TGTAGATCCT GTTAAACCAG	2400
CCTATAGCGA CAAGGGTGAT CTATACAAGG GTGACCAATT ACTAGGAAAT ATCTACTTCA	2460
CAACAAACAA AACTTCTCCA TTAGAATTG CCAAGGATAG CTATCTATGG ATGTCTACA	2520
GTGATGACGA CGGGAAAGACA TGGTCAGCTC CTCAAGATAT TACTCCGATG GTCAAAGCCG	2580
ATTGGATGAA ATTCTTGGGT GTAGGTCTG GAACAGGAAT TGTACTTCGG AATGGGCCTC	2640
ACAAGGGACG GATTTGATA CCGGTTTATA CGACTAATAA TGTATCTCAC TTAGATGGCT	2700
CGCAATCTTC TCGTGTCA TCATTCAAGATG ATCATGGAAA AACTTGGCAT GCTGGAGAAG	2760
CGGTCAACGA TAACCGTCAG GTAGACGGTC AAAAGATCCA CTCTCTACG ATGAACAATA	2820
GACGTGCGCA AAATACAGAA TCAACGGTGG TACAACAAA CAATGGAGAT GTTAAACTCT	2880
TTATGCGTGG TTTGACTGGA GATCTTCAGG TTGCTACAAG TAAAGACGGA GGAGTGACTT	2940
GGGAGAAGGA TATCAAACGT TATCCACAGG TTAAAGATGT CTATGTTCAA ATGTCTGCTA	3000

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TCCATACGAT	GCACGAAGGA	AAAGAATACA	TCATCCTCAG	TAATGCAGGT	GGACCGAAC	3060
GTGAAAATGG	GATGGTCCAC	TTGGCACGTG	TCGAAGAAAA	TGGTGAGTTG	ACTTGGCTCA	3120
AACACAATCC	AATTCAAAAA	GGAGAGTTTG	CCTATAATTG	GCTCCAAGAA	TTAGGAAATG	3180
GGGAGTATGG	CATCTTGTAT	GAACATACTG	AAAAGGACA	AAATGCCTAT	ACCCTATCAT	3240
TTAGAAAATT	TAATTGGAA	TTTTGAGCA	AAAATCTGAT	TTCTCCTACC	GAAGCGAACT	3300
AGAGAGATGG	GCAAAGGAGA	GATGGGCAA	GGAGTTATTG	GCTTGGAGTT	CGACTCAGAA	3360
GTATTGGTCA	ACAAGGCTCC	AACCCTCAA	TTGGCAAATG	GTAAAACAGC	GACTTCCCTA	3420
ACCCAGTATG	ATAGCAAGAC	CTTGTGTTT	GCAGTAGATA	AGGAAGATAT	CGGACAGGAA	3480
ATTATTGGTA	TAGCTAAAGG	AAGCATCGAA	AGTATGCATA	ATCTTCCTGT	AAATCTAGCA	3540
GGTGCCAGAG	TTCCCTGGCGG	AGTAAATGGT	AGCAAAGCAG	CGGTGCATGA	AGTTCCAGAA	3600
TTTACAGGGG	GAGTTAATGG	TACAGAGCCA	GCTGTTCATG	AAATCGCAGA	GTATAAGGAA	3660
TCTGATTCGC	TTGTAACCTCT	TACTACAAAA	AAAGATTATA	CTTACAAAGC	TCCTCTTGCT	3720
CAGCAGGCAC	TTCCCTGAAAC	AGGAAACAAG	GAGAGTGACC	TCCTAGCTTC	ACTAGGACTA	3780
ACAGCTTTCT	TCCTTGGTCT	GTTTACGCTA	GGGAAAAAGA	GAGAACATA	AGAGAAGAAT	3840
TCTAAACATT	TGATTTGTA	AAAATGGCTC	TTTGTCAACT	GTAGTGGGTT	GAAGTCAGCT	3900
AAGCTCGAGA	AAGGACAAAT	TTTGTCTTT	CTTTTTGAT	ATTCAGAGCG	ATAAAAATCC	3960
GTTTTTGAA	GTTTCAAAG	TTCCGAAAC	CAAAGGCATT	GCGCTTGATA	AGTTTGATGA	4020
GATTATTGGT	CGCTTCCAAT	TTGGCGTTAG	AATAGTGTAG	TTGAAGGGCG	TTGACGATTT	4080
TCTCTTTGTC	CTTTAGAAAG	GTTTAAAGA	CAGTCTGAAA	AAGAGGATGA	ACCTGCTTA	4140
GATTGTCCTC	AATGAGTCCG	AAAAATTCT	CCGGTTCCCT	ATTCTGAAAG	TGAAACAGCA	4200
AGAGTTGATA	GAGCTGATAG	TGATGTTCA	AGTCTTGTGA	ATAGCTCAA	AGCTTGTAA	4260
AAATCTTTT	ATTGGTTAAA	TGCATACGAA	AAGTAGGGCG	ATAAAAATGT	TTATCGCTGA	4320
GTTTACG						4327

(2) INFORMATION FOR SEQ ID NO: 118:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 3521 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 118:

CTCTGGCCCT GCCACTCCAA CGTTTGTCAGGGTGCTTT TTCATAAAGG AGTTCTTATG

60

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TTAGATATCA AACGTATTG TACAGATTT GAAGCTGTCG CAGAAAAATT AGCTACACGT	120
GGTGTAGATG CTGCTGCTT GAATGAAATG AAAGAAATCG ATGCTAACAG TCGTAACATC	180
TTGGTCAAGG TTGAAACTCT CAAAGCAGAA CGTAACACAG TTTCTGCTGA GATTGCCAA	240
GCTAAGCGCA ACAAGGAAAA TACAGATGAC AAGATTGCTG CCATGCAAAA TCTATCTGCT	300
GAGGTTAAAG CCTTGGATGC TGAATTGGCA GAAATCGATG CTAATTGAC AGAATTTACA	360
ACGACTCTTC CAAATATCCC AGCTGACAGC GTTCCCTGTTG GGGCTGACGA AGACCGACAAT	420
GTGGAAGTTC GCCGTTGGGG TACTCCACGC GAGTTGACT TCGAACCTAA AGCTCACTGG	480
GATCTCGGTG AAGACCTTGG TATCCTTGAC TGGGAACGCG GTGGTAAGGT AACAGGCGCT	540
CGCTTCCTCT TCTATAAAGG CCTCGGTGCT CGTTTGGAAC GTGCTATCTA CAACTTTATG	600
TTGGATGAAC ATGGAAAAGA AGGCTATACT GAAGTCATCA CACCTTACAT AGTCAACCAT	660
GATTCTATGT TTGGTACTGG TCAGTATCCA AAATTTAAGG AAGATACTTT TGAACTCAGC	720
GATACCAACT TTGTCTTGAT TCCAAGTGC GAAGTTCCCTC TGACAAACTA CTACCGTGAT	780
GAAATCTTAG ACGGCAAAGA TCTTCCAATC TACTTCACTG CCATGAGTCC GTCATTCCGT	840
TCTGAGGCTG GTTCTGCCGG TCGTGATACG CGTGGCTTGA TCCGTTGCA CCAATTCCAC	900
AAGGTTGAAA TGGTCAAATT TGCCAAACCA GAAGAATCTT ACGAAGAATT GGAAAAAATG	960
ACAGCCAACG CTGAAAACAT TCTCAAAAAA CTCACCTTC CATAACCGTGT CGTTGCTCTC	1020
TCTACTGGAG ATATGGCCTT CTCAGCTGCG AAGACTTACCG ACTTGGAAAGT GTGGATTCCA	1080
GCACAAAACA ATTACCGTGA AATCTCAAGC TGTTCAAACA CAGAAGATTT CCAAGCCCGT	1140
CGTGCCAAA TCCGTTACCG TGATGAAGCA GATGGCAAGG TGAAACCTCT TCATACCTTG	1200
AACGGTTCTG GACTTGCAGT TGGACGTACA GTGGCTGCA TTCTTGAAAA TTACCAAAAT	1260
GAAGATGGTT CTGTGACCAT CCCAGAAGCA CTTCGTCCAT ACATGGGTGG AGCTGAAGTC	1320
ATCAAACCAT AAAAAATAAG GTTAGCTAT TTCTAGCTAG ACCTTTTTTC GTAACCAAAT	1380
CAGATAAGCA CCTAGTACAA AGAATAAAAT AGTTAGGCAT ATAATGGTTT CAGCCAATAC	1440
CAGGTAATCC AGAAATGGAA GTTCAAAAT TCCCTGAGCC ATCTTGAGCG AGGTCGCTGT	1500
GATAATGGTT GGGAAAGGTGA GGGCTGAGAA GGCTGGTTGA AAACCTTGTGTT TTAAATGTT	1560
GGGCAGACGA GTTAAACAA AGAAAAAGAA GGATTGAGAA GCCAAATCA TGACAATCAA	1620
GACCCAAGTC GGCAGGCTGG TTCCCTCTAC TCGAACTAGA GAAGCCAAGA GTAGAGAGAA	1680
AGGAGCACAG TAGATTCTT CTTGTCCAAG CAAGGCTAGT GGGAGTGGAT GTTTCTTAA	1740
ATCGCTATAA ATAAGGGGAT AGAGATAGAA GGTCAAGAGA AAACCAAAAC TCAAGGTCGC	1800

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ATAGGCAATT TCGATAATAC CTACCAGAGG ATAGGTCAAG GCAGCCACTG CTATCCCCAC	1860
ATAGAGAACC GTCCAGCTTG GAGTGGCATG AACCCCTCCGC CCTGGACAAG CAAACTTGAT	1920
GGTAAAACCA GCAATCAAGG TCAAATCCAA GAGAAATGAA AACCAACAAA TCCCTTGTGC	1980
TACCAAAGGA AGATAAGAGA ATACCGAAA GACATAGGTC GATAAAATCA TCCCAGCCAT	2040
AGGAAAGGTT GCCATTCCTG ACAAAAGAGG GGGCTTGGTC AATTCTTGCT TGTTTCTTT	2100
CCAATTAAAG AGATGCAGAA TTAGAAAGTA AATCCATAAA ACCAAACCAA TCAGACTAAA	2160
AAGATGGGAT AGAACCGGCA ACGTATCTAA AATAAGATT CCAGCTCCTG CCAAACCTAG	2220
CAAACAACCT GAAAATACTA AGGGGAGTTT TTTCATCCTA ACCTCCAATA ATCATGTTAG	2280
TTTCAGTATA ACATAAAAGC GCTTAAATGA GGATTTAAAA AAACGAGTCC GCTTATTTC	2340
GACTTCATTT TACTCAGATA TGAATTAGGC ATAAGGTTGC AATTCTGGAT TAATTGGTGT	2400
ATTAGCTAAG TTGTTGGCAT AGTTACAGAG GATTGCTAGG CTGACACCAA AAACCACATC	2460
CAAGGCATTT TGTTGAGTGT AGCCAGCTTC TAAAAACTCA GACAAGGCTT CATCTCCTAC	2520
ACGACCCCTG GTATTGATAA CTGCCAAGGT AAACCTAGCT AGGGTATCCA ATTTAGGATC	2580
TGTTTCAATT GGAGTACGAT TCGGAAGAGC TTGAATCAAG TCATCATICA TCTGGATTG	2640
TTTGATGGAA AAGGCTGTGT GACCTGCGAC ACAGAAGGCA CAACCATTGG TCACGGCTGC	2700
CGTGATTTCG ACCACTTCAC GCTCAACGGG TGTCAGGCTG TTGCGACGGT GGATAGATGA	2760
GACAATTGG TAGGCTCTA AAACAGTCGG GGCATTGGCC AAGAGACCGA TTAGGTTGGG	2820
AATATAGCCA TTGTTGTCTT TTTCTACTGT TTCAAGAATT TCTTTCACTT CTGCTGGTGC	2880
TGACTCTACT GTATGGATAG TAAATGTTGT CATAAGATAAC CTCTTTCTT ATTATTGACA	2940
CTAATATTAT TGGAAAATCT TATAAAATCC TGATTCCTAA GTTTATCTAA GATAAGCTT	3000
TATTCTCTCA TAAGATTTTC GTTGTATAT TAGTTTATCA CACTTCCAAT CACTTGTATA	3060
ATATATATTA TATATCAGGC TGATAAAAAT TATTATAGG CAAAAAAATC ACACGAGCTG	3120
TGTGATTCCA TTATTTGTCA AAATACTTTT TAGTTTCAGC AATAACGACT GGCGACAAGA	3180
CCAAGAGGGC AATCAAGTTT GGCAGAGCCA TCAAGGCCTT AACGATATCT GCGATAATCC	3240
AGACCATATC CAACTCGATA AATCCTCCTA ACAAGACCAT GAGCACAAAA ACCACACGGT	3300
AGAGCCAGAT AAAGCGAACCC CAAAGAGGA ACTCAAACACA GCGTTCTCCG TAATAGTTCC	3360
AACCTAGAAT CGTTGTAAAG GCAAAAGTA CAAGGAAGAT GGTCAAGAGA GCAGGCCAA	3420
AGTGTGAAAA GTTTGTTGAG AAAGCTGACT GAGTCAAGGC AACCCCATTC AAGTCACCGC	3480
TCCAAACTCC AGTTACCAAG ATGGTCAAAC CAGTTAGAGT A	3521

(2) INFORMATION FOR SEQ ID NO: 119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1968 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 119:

AACCTGGGCA	AGCAAGCTAA	AAGCAATGGG	ACCTGGAATC	CTAATGGCAA	CTGCCGCTGT	60
TGGAGGTTCC	CACATTGTAT	CCTCAACTCA	AGCTGGCGGT	TCTTACGGTT	GGTCTCTACT	120
TCTCTTGGTC	ATCTTAGCCA	ATGTCTTTAA	ATATCCATT	TTCCGTTTG	GTGCTGAATA	180
CACAGCTGAT	ACTGGAAAGA	CTTGGTTGA	AGGTTATGCC	GAAAAAGGAA	AACTCTATCT	240
CTGGATTTTC	TTTATCCTCA	ATGTCTTTTC	GGCTATGGTC	AACACGGCTG	GTGTTGCCAT	300
TCTGTGCTCA	GCTATCATCG	CCAGTGCCCT	CCCAATGATT	GGACTTAGCA	TTACTCAGTG	360
GTCCTCTATT	CTCGTTGCAA	TCATTTGGGC	TATGCTACTC	TTTGGAGGCT	ACAAACTTTT	420
AGACGGCATG	GTCAAATGGA	TTATGTCTGC	CTTAACCATT	GCGACTGTTC	TTGCAGTTAT	480
CATTGCGGCG	GTCAAGCATC	CAGAATACAG	TTCTGATTTT	GTCGAGAAGA	CACCTTGGCA	540
AATGGCAGCT	CTGCCCTTCA	TCGTCTCCCT	CCTAGGATGG	ATGCCGGCTC	CTATTGAAAT	600
TTCAGCCATC	AATTCACTTT	GGTCAGCTGA	AAAGAGAAAG	ACCGTCAACT	TTAACACAGA	660
AGACGCTCTG	TTTGACTTTA	ACACTGGTTA	TATTGGAACA	GCTATCCTAG	CCGCTTCTTT	720
TGTGGCACTG	GGAGCACTGA	TTCAGTATCC	TACAGGGCAG	GCGGTTGAAG	CTGCTTCAGC	780
CAAATACATC	TCTCAATTG	TGGGCATGTA	TGCCTCTGTT	CTTGGCGAAT	GGTCCCGTTA	840
CTTGATTACC	TTTATTGCCT	TCCTCTGTAT	CTTTGGAACA	GTTATAACTG	TTATCGATGG	900
CTATTCTCGC	GTAAATCAGG	AATCTCTCCG	ACTGCTAATC	AGTCAAAAG	AGGACAATCG	960
TAAATCTTG	AACATCTGGA	TGACCATCAC	TGCTATCATC	GGTATCGTCA	TTATCAAGTT	1020
CTTCGCTGGT	CAGGTTCAA	CCATGCTCCG	CTTGCCATG	ATTGGCTCTT	TCCTGACAAC	1080
ACCTTTCTTT	GCTCTTTGA	ATTACGCCCT	GGTAACCGGT	GAAAACAAAA	ATCTTCCTTC	1140
TTGGCTCAA	CACCTTGCA	TTGCGGGATT	GATTTCCCTC	TTTGCTTCGC	CATCTCTTT	1200
ATCTACGCAC	TCGCAATCGG	AAAACCAGGG	TAAGGGACAA	GCGCGAGATG	AAGATAAGGT	1260
TTCATTCAA	GAGAAAATTC	AGCAAATATT	TCTATGATAA	AAAGCATAAG	AAACAGGTTT	1320
TGAAGACCTG	AACTTATGCT	TTTTTACGTT	CTTAAAGACT	GTTTATACTC	AAAAAACAGT	1380
TGAACAACTT	CAACCACCTC	TTATAAGAAC	TTTATACTAT	TCGAGAATCT	CTTCAAACCCA	1440

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CGTCAGCTCT ATCTGCAACC TCAAAGCTGT GCTTGTGAGCA ACCTGCGACT AGCTTCCTAG	1500
TTTGCTCTTT GATTTTCATT GAGTATTAAT TCTCCTTTTC CAACTCATAC AAATCTGCGA	1560
TAATAGCTGC GACATGTTG ATATCTTCCA GCATGCCTCG CATTCAAAG TCAGCCAATA	1620
CAGGGAAGCC AAAGCGTTGA CTGTATTGCT TGGCTGTTAG GCAGTATTGG TTATTAAGT	1680
TACGATTTC TGACCCAACC ACACCAAAAC ACTTACTAGC ATTGTTACCA TAGGCAATAA	1740
AATCTCCAC CGGTGTCGTC AAAATCTCAA CATCTCCGTAT ATCCACGCCA TTCCACCTT	1800
CGAGATAGGT CGGCAAAAAA GCGACATAGG GATGGTCCAT TTCATAGAAA TTTTGCCCTT	1860
CCTTGACCAA ATCCTTGATA TGAATCTTTT GAACCTCAAT CCCTTTGTAC TGGGACAAGA	1920
GATAGTCTTT CAAGCGCGTC ACAAAACTTT CAGTGTGCCC ACTCAAGG	1968

(2) INFORMATION FOR SEQ ID NO: 120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 120:

CCGCATTTT TATCACTAGA CTCGAGACAT CTTTGAGTG GCTCTGCTC TCTGGTTAA	60
TTTTCTTCCT TGCTCAAGGA CTCCTGCTAT TTCTCTGGT CGTCCGACTC AAACATCAAT	120
TCGCTGAGAT TTATCCTCAA ATCAATAAAA AGATTCGTTT CTACTATTAA GGGGTTCTCA	180
CCATTGATTT TCTATTTTTT GTTCTCTTAG CCTTCATTAG TTCTCAGCGT TTTTCATCTC	240
TTATGCCAAT CATCACTGCT TGCCATTCTA CTTTTTATTA TATGACAGCT GACTACCTAA	300
GAGAAAACCA TCCAGACTTT TACGACAAAC ACATCTTTT ATGGGAGTGT CTCTAAAGAA	360
AAGGAGGTTT TAGCATGAAA AAAATCATCT TCATCAAAAC CATTCAACTC CTTGTCATTG	420
ATGGAATCAT GCTGGCATT TTGACATTAA AAAGGGGGCT TACTTGGAC TGGATTTGA	480
TTTATAGCGG TTGGCTCATT TTCTTCATC CTGTGCTATT GACCTATCTT TCAAACCAAC	540
TTTGTGACCA CTTTAGTTAA CTCTATTCCC AGATTAGACC GAGATTCTGG CGTTTGCTT	600
TACAAATTCT CCTATGGGAT AGCCTGATGA TTCTCTCCTT GGTGTCTTTA AGTGATATTCA	660
CACTTTCCCT TCAGGGAACT CTCCTCATCC TAGGACATCT CATCCCTTCC TATCGCATCT	720
GCCAAAGCCT GAAAAGAGAC TTCCCCAAG CATATCAAGA ACCGATTCT TTTTGGAGTA	780
TTTTATGATA GATGAGAAAG ACCAAGCCGA CTGGGCTTGG TCTTTCTTAT CTCTTTTAG	840
TATCTAGGAT AATGGTAACA GGTCCATTAT TAACCAGCTC AACCTGCATA TCTGCTCCAA	900

847

AGATGCCTGT	CTGAACGGGC	ACTTCTGCG	CTAATTTTG	ATTGAAAGCA	TCATAGAAGT	960
CTGATGCCAT	ATCAGGTTA	GCTGCCCTG	TAAAGgCTGG	ACGATTGCCT	CTCTTAGTAT	1020
CCGCAAAGAG	GGTAAACTGA	GAAATAGAGA	GGATTCTCC	TTCAATATCT	TTGACAGACAA	1080
GGTTCATCTT	GCCTCTGCG	TCTGAAAAAA	TCCGCATATT	GACCAGTTT	CTCACAGCAT	1140
AGTCCAAATC	TTCCTCTGG	TCCTCTGGTC	CAACACCAAC	CAGCAATAAA	AGTCCCTGAT	1200
TGATTTTCC	CTGAATCTGG	CCTCTATAC	TCACTTGGC	TTTTTTAAC	CGTTGGATAA	1260
TGATTTTCAT	AATAGCCTTT	CTAGTAAGAG	CTAGGACAAAC	TAGCCGTTGG	TCCGTTGAC	1320
AGAGTAAACT	TCTGGCACAC	TCTTAATTTC	ATCGACAACC	GTGGTCAGTG	TAGAGAGGTT	1380
GGCAATACCG	AAGgACACAT	GGATATTAGC	AAACTTCATA	TCCTTGGTTG	GTTGGCATT	1440
GACCGTTGAA	ATATTCTTG	TTGTATTTGA	AAGAACCTGC	AGTACATCGT	TCAACAGTCC	1500
TGTACGGTTG	AGACCGTAGA	TATCGATATG	GGCCATATAC	TCCTTATTTG	AGCTAGGGTA	1560
CTGGTCTTCC	CATTCCACAT	CAAGGAGACG	TTGCTCGTAG	TTTTCTTGGG	CACGCAGGTT	1620
CATACAGTCC	ACACGGTGA	TAGCCACACC	ACGACCCCTTG	GTAATGTAGC	CAACAATATC	1680
GTCACCAGGC	ACGGGGTTAC	AAACACTTAGC	AATCCGCAC	AGGAGACCAAG	AAGCACCTTC	1740
AATAACCACT	CCCCCCTCAT	GCTTGACCTT	GAGGGTTCT	TTATTTCAA	CCTTGACCTC	1800
GCCACCTTG	ACAAGCTCCT	CTGCCTCAGC	TTGGCCTTG	GCACGCTCTT	CCTCACGGCG	1860
TTCCCTTCA	GTCAGACGGT	TAAAGACGGT	AATCGCACCG	ATTTCCCCAA	AACCAATGGC	1920
CGCAAAGAGG	GAGTCTTCTG	TCTGTAACT	GGTCTTTGC	AGAACTTGAT	CCATGTGGCG	1980
CTTGTCCATA	AATTATTTG	CCACATAGCC	ATTTCTTG	AACTGAGCCA	TCAGCATCTC	2040
ACGACCCCTG	TTGACAGACA	ATTCCATTATC	TTGGTTTTA	AAGAACTGGC	GAATCTTATT	2100
GCGCGCCTTG	CTAGTCTTGA	CCATATTGAG	CCAGTCACGG	CTAGGTCAA	AGGAGTTCGG	2160
GTTGGCGATA	ATTTCAACCT	GATCCCTGT	CTTTAACTTG	GTTGTCAGTG	GAACCATGCG	2220
GCCATTGACC	TTGGCACCAG	TTGCTTTTC	ACCGACCTTG	GTATGGATTT	CGTAGGC	2280
ATCAATCGGT	CCTGAATCTT	TGGGAAGGGA	ACGGACAGCT	CCATCTGGGG	TAAAAACGTA	2340
AATCTCCTCA	GCCAAATAGT	TTTCCTTAAC	AGAGTCCACA	AATTCCTTAG	CATCATCAGC	2400
CTGGTCTTGG	AGCTCCATCA	TCTCCTTGAT	CCAGTTCAT	CCAATAGCTG	ATTCCATTGCT	2460
GTAACTTGC	CCCTTATAC	CTTCTTATA	AGCCCAGTGA	GCCGCAACCC	CGTACTCAGC	2520
CACCTCGTGC	ATTTCCCTGG	TTCGAATCTG	GAATTCAATC	GGCCCTTTG	GTCCATAAAC	2580
AGTCGTATGG	ATAGACTGAT	AACCATTGGC	CTTGCAGTTG	GCGATATAGT	CTTTGAAGCG	2640

848

ACCTGGCATC GGTTTCCAAA ATTCAATGCAC GTAACCAAGC ATGGCATAAA CATCACTTTG	2700
GGTATCTAAA ATACAACGAA TAGCAATCAG ATCATAGATT TCCTCAAACC GTTTTCTCTT	2760
GTCCTGCATT TTGCGGAAAAA TTGAGTAAAT ATGCTTGGGA CGACCATAAA TCTTCCCTTT	2820
CAAGTGACGT TCTGTCGTAT ACTCCTCTAA TTTTGTGACT ACCTCATCCA CCAAGGCCTC	2880
ACGCTCCCTG CGCTTTCCCT TCATCATATG GGTAACTCTG TAAAACCTCG TTGGATTGAG	2940
ATAACGGAAA GACAAGTCTT CTAATTCCCA TTTGACACTG GAAATCCCCA AACGATGGGC	3000
AAGCGGGGCA TAGATTCCA TGGTTTCTTT GGAAATACGC TCCTGCTTGT CTTTTCGAAG	3060
ATGTTTCAGG GTCCGCATAT TGTGCAAGCG GTCAGACAGT TTGACCAAAA TAACGCGGAT	3120
GTCCTCAGAC ATGGCCATGA GCATCTTGCATG ATGATTTCC GCTAATTGCT CCTCGATCGA	3180
TTTGTACTCG ACCTTGCCAA GCTTGGTAAC TCCGTCAACA ATCATCCGA CATCAGGACC	3240
AAACTCTCTT TCCAAATCGT CCAAAGTCGC ATCTGTATCT TCCACCACAT CATGCAAGAA	3300
TCCACAAGCT ACTGTTACAG CATCCAGCTT TAGCTTAGCT AAAATACCTG CCACTTGGAT	3360
AGGGTGAATG ATATAAGGCT CGCCTGATTT GCGATATTGA CCACTGTGGC ATTCAACAGC	3420
ATAGACCAAG GCCTTATGGA CAAATGAAC ATCCCTTCC GTTAAATATT CTTTGGTTAA	3480
AGCGACAAC TCTTCGCCCTG TTAAATTACAC TTCTTTCGGC ATCTCTACTC TCCAATTCTT	3540
CCTACCATT TATCACTTTT TTAAGAATAT GAAAACCTAGA TTGGAACAGA ATAAGAAAAA	3600
AATAATTCAA AATTGCTTGA TAATTCTGAA TTATTGGTCC GTAATATACT ACGAAGTTAG	3660
ATTTTAAACT TAGGTGATAG AAGGAGAGAT AGAAGAACGG AAACCATAATT GTAACCCAAA	3720
GACTTTCTGA CTTCCCCAAT TCCATTGAAG ATACGAAAGA TAAACGGTGG AACTCGTATC	3780
ACATACACTG GTACCTTGAC TGGATTTGG AATTAATACT AAATGAAAAT CAAAGAGCAA	3840
ACTAGGAAAC TAGCCGCAGG TTACTCAAAG CACCGCTTTG AGGTTGCAGA TAAAGTTGAC	3900
GCGGTTTGA GAGATTTTG AAGAGTATAA AAATCCTCAA GATACTTCT TCTATCCTTT	3960
AGTTTATAAG GAGAATACCT ATGAAAAAAA CTGCTATTTC TATCTTGCT CTCCTAAATGT	4020
TAGGAGTTTG CTGCCTGTTCTATTCAGCC AGCAAAGCTA TAAAAAACAG TCGTTCAATA	4080
CTATGCTAAC GACCAGAAC TGCCCAAGTAG GATAACTTAT AGTGAATATA GCGACAAATG	4140
AGAAGCCAAC TACGGTAGCA CTCTAACAT CACGTCTATC AAACAAGCTA ATGACGGAGT	4200
TTATGCAACC TATGAAGGGC AATTGACACC TTTCCAATAT TGATAAAATG ATAACCAGCC	4260
TGTCTTCATC TAGTCATGCT GGTTTTAAG TTCATTTAA ATCCTTACCT ATTCTCCCTA	4320
ACTGTGCTAT ACTTAATTAA TACTCAATGA AAATCAAAGA GCAAACCTAGA AAGCTAGCCG	4380
CAGGCTGTTCAAG CAGCTGTTG CAGATAAAAGT TGACGGGTT TGAAGAGATT	4440

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TTCGAAGAGT	ATTAGTACAT	TCTTTGAGAT	TGGAGCTAGT	ATGAAAATCC	ATAAAACCGT	4500
GAATCCTGTT	GCCTATGAAA	ATACCTATTA	TCTAGAAGGC	GAAAAGCACC	TCATCGTCGT	4560
CGATCCTGGT	AGTCATTGGG	AAGCCATTG	TCAGACAATC	GAGAAGATCA	ACAAACCGAT	4620
CTGTGCTATT	CTCTTGACCC	ACGCCATT	TGACCATATC	ATGAGTCTGG	ACTTGGTTCG	4680
CGAGACGTTT	GGCAATCCTC	CTGTCTATAT	CGCAGAGAGC	GAAGCCAGCT	GGCTCTACAC	4740
TCCTGTCGAT	AATCTCTCCG	GTCTCCTCG	CCACGATGAT	ATGGCAGATG	TGGTCACAAA	4800
ACCTGCAGAA	CACACCTTG	TCTTTCACGA	AGAATACCAA	CTAGAGGAAT	TTCGTTTAA	4860
GGTTCTACCG	ACCCCAGGGC	ACTCTATCGG	TGGTGTTC	CTAGTCTTTC	CTGATGCTCA	4920
TCTAGTCTTG	ACGGGAGATG	CTCTATTCCG	CGAAACTATC	GGACGGACCG	ACCTTCCGAC	4980
TGGTAGCATG	GAGCAACTCC	TTCATAGTAT	CCAGACCCAA	CTCTTCACCC	TACCAAAC	5040
CGATGTCTAT	CCAGGACATG	GTCCAGCTAC	TACTATCGCT	CACGAAAAGG	CCTTCAATCC	5100
CTTTTCTAG	CAAGATGATG	ACAATCGAA	TTTAAGTAAA	CTATCCAGCA	AATCTTCTA	5160
TTACAAAAGG	CATCCTATCA	AGGTTTCAC	ACATGATTGG	ATGCCTTTT	TCTGATGACT	5220
AGATTTTTTG	CATTACCAAA	TAATCACGCG	CTCCTCTGGT	GAACGCCACA	TTCCGTCTCC	5280
TTCTTTGACA	TCATAGGTTG	AAAGAAATC	GTCGAAGTTT	GGTACTTGCA	CATTGACACG	5340
GAGTTTGCT	GGTGCCTGCA	CATCGACGCT	AGCCAAAAGT	TTCATAAATT	CTGGTCGACC	5400
TTTCATGCGC	CAGATGCGAC	CGAAGTTGTA	GAAGAACTCT	TCTGCTGAGA	AGTCTGCTTC	5460
TCTCTTAGCT	GCTTCAAGCG	CTGCTGCGAT	TCCTCCAAAG	TCAGCCACGT	TTCTGATAC	5520
AGTCAATTAA	CCGTTAATGG	TTGCTCCATA	AGAATCCTGT	CCATCAAATT	GGTCAATGAC	5580
TTTTTGTGTT	TTCTCCTTGA	AGGCAGCATA	GTGCGCTCT	GTCCACCAAT	CCTTGAGGCT	5640
ACCATTTTCG	TCAAAGGAAG	CCCCGTTAGT	ATCAAAGGCG	TGGGAAATT	CATGGGCAAT	5700
CACTGCCCA	ATACCACCGT	AGTTAGCAGA	AGATGACTGA	TGCAAGTCAT	AGAAAGGC	5760
CTGTAAAATG	GCCGCTGGAA	AGACAATCAG	GTTCTCTGA	GGATTGAGT	AGGCATTGAC	5820
CATATGAGCA	GGCATGCC	ATTCCCTATA	ATCTACAGGC	TGGTTCCACT	TACTCCA	5880
GTGCTTGATT	TCCACACGCG	CAAAGGCTAG	AGCATTCTCA	AAAAGACTGG	CAGTTTCATT	5940
CACTACCTTA	TCCTTGTAAC	GTGCAGGCAA	TTCTTCTGG	TAGCCAATAT	AAGGTTTGAT	6000
CACATTGAGC	TTCACGGATAG	CCTGTTACA	GGTTTCTGGA	GTGAGCCAGT	CATTCTTAAG	6060
CAGACGCTCC	TTATAAACAT	CAATCATGGT	TGCCACTTTT	TTCTCCACAT	CCGCCTTGGC	6120
TTCTGGAGAG	AACTTCTCAC	GGGCGTACCA	AAGACCCAGG	GCTTGCTTGA	AAGGTTCTTG	6180

850	
TGCTAGATGA TAAGCTGCTT TGACCTTATC TTTTGCCCTCT GGAACTCCAG AAAGGGCACG	6240
GCTGTAGGCA CCAGACAAAA CACGGATATC CTCTGTTAAA TAGCTGGTTG AAAGATTGAC	6300
AACACTCAAA ATCAAGGTTG CTTAAGGAG AGACCAGGCT TCCTCACTGT AGAATTGCTC	6360
TGCTGTTGC CAGAAACGTT CCTCGTCTAC AATAACCTTG TCTGGTAATT GCCCAATAAC	6420
TGCTTTGAAG AAGTCATCCA AAGGTAGGGC AGGCGCGAAT TTCTTGAAAT CTTCGTAAGA	6480
ATATGGATGA TAGAGTTAG CATATTCTGA ACTTTCTTC TTAGAGAGCA CCACTGCCGC	6540
AACTCGGGCGG TCCAATTCAA GTCTTTTTC TAGCAAGTCT TCAATTCTT CATCAGAGAA	6600
ATCATAAGCC TTGAGGAGAT TTGCGCTGCT TTCTTCCAA AGAGTCAGA GCTCTTCGCG	6660
CTGAGGATGT TCTTCGCT AGTAGGTCGT ATCTGGCAAG ATTGTGCTTG GAGCGCTAGC	6720
CCATAGAACAA TTGATTCTAG CATCCATAAA GTCTGGCGAT ACACCAAAAG GAAGGAAGTT	6780
TGGTTTCCT GCAAGCTCAA ACTCTGCTAG TTTAGCTGTA AAATCCGCAA AAGTCTCCAA	6840
TTCTTGAAT TCTTAAGGA GTGGTAAGAC AGGTGTGATA CCGTCAGCTT CTCTCTTGTC	6900
AAAATCACGA ACTAGGCGGT GGTATTTGAC AAAGTTTCC AAGATAGCAT CCTCAGGCAC	6960
TTCTTCACCT GCTAACCACT TGTCTGTTGT CGCCAGCATE AGGTCTTCAA TTTCTGGTC	7020
TAAATCAACA AAACCTCCCTG TTGAGACTT ATCTGCTGGG ATTTCAAGCTG TCTGTTGCCA	7080
TTCTCCATTG ATAGCATCAT AAAAATCATC TTGATAACGT GTCATCTTGT TCTCGCTTTC	7140
ATTTGTATTT GCATTATCT TAACAAAAAT CG	7172

(2) INFORMATION FOR SEQ ID NO: 121:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4518 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 121:

CGGGAAGTTA TGCGATCTAG ACTTCGTTCC TGTACAGCTA CTTTCTCAGG TGGTCTTGTT	60
GTTTGTATGA GTTTGTTAG AGAGGATCTT TCTATGTCTT TCTTTCTTAT TTTTGTTTA	120
TATGCTTTTC TGATTTCTTA TCTAATTAT GGTTATTCA GACTAAAAAG GAAATACCGA	180
GTAGATGAAT AGCAAGGTTG TAGGTCTTCA GATTGATTAG TAGCACTTT GATAAAAGAG	240
TGCTAAATTG TTGAGTTTT GTCTTGACAT TCTCTTCTAA GGGTGTATAA TAGAATCATG	300
AGTTAGCACT TGGATGCATT GAGTGCTAAT TGATCAGACA GAGAGGAGTG ATGAGATGGT	360
TACAGAGCGT CAGCAGGATA TTTAAATCT GATTATTGAC ATCTTTACCA AAACGCACGA	420

851

ACCTGTCGGA	TCAAAAGCCT	TGCAAGAGTC	TATTAACCTCT	AGCAGTGCAA	CCATTCTGAA	480
TGACATGGCG	GAACTAGAAA	AACAAGGGTT	GCTTGAGAAG	GCTCATACTT	CAAAGTGGTCG	540
GATGCCAAGT	GTTGCTGGTT	TTCAGTACTA	TGTGAAACAC	TCACTGGATT	TTGACCCGGCT	600
GGCTGAAAAT	GAGGTATATG	AGATTGTCAA	AGCCTTTGAT	CAGGAATTCT	TCAAATTGGA	660
GGATATTCTG	CAAGAGGCTG	CTAACTTACT	AACAGACCTG	AGTGGCTGTA	CGGTAGTGGC	720
ACTGGATGTT	GAGCCGAGCA	GGCACGTTT	GACAGCCTT	GATATCGTTG	TTTGGGGCA	780
ACATACAGCC	TTGGCGGTAT	TTACCCCTAGA	CGAGTCGCGA	ACGGTTACTA	GTCAGTTCT	840
GATTCCAAGG	AACTTCTTGC	AGGAGGATTT	GCTGAAACTG	AAGAGCATCA	TTCAGGAACG	900
TTTCCTCGGT	CACACCGTTT	TAGATATTCA	CTACAAGATT	CGGACGGAGA	TTCCGCAGAT	960
TATCCAGCGT	TACTTTACAA	CAACGGATAA	TGTCATCGAT	CTCTTGAAC	ACATCTTAA	1020
GGAAATGTTT	AACGAAAACA	TTGTGATGGC	GGGCAAGTC	CATCTCTTGA	ATTTTGCCTA	1080
TCTAGCAGCC	TATCAGTTCT	TTGACCAACC	GCAAAAGGTG	GCCTTGGAGA	TTCGTGAGGG	1140
GTTGCGTGAG	GATCAGATGC	AAAATGTTCG	TGTTGCAGAC	GGTCAAGAGT	CCTGTTTAGC	1200
TGACCTAGCG	GTAATCAGTA	GTAAGTTCCCT	CATTCCCTAT	CGGGGAGTTG	GAATTCTAGC	1260
CATTATCGGT	CCAGTTAACATC	TGGATTACCA	ACAGCTAAC	AATCAAGTCA	ATGTGGTCAA	1320
CCGTGTTTTG	ACCATGAAGT	TGACAGATTT	TTACCGCTAC	CTCAGCAGTA	ATCATTACGA	1380
AGTACATTA	GATTGAAATC	ATTAAAGGAG	GCGAACATGG	CCCAAGATAT	AAAAAATGAA	1440
GAAGTAGAAG	AAGTTCAAGA	AGAGGAAGTT	GTGAAAACAG	CTGAAGAAC	AACTCCGTAA	1500
AAAGTCTGAGT	TGGACTTGGC	AAATGAACGT	GCAGATGAGT	TCGAAAACAA	ATATCTTCGC	1560
GCTCATGCAG	AAATGAAAAA	TATCCAACGC	CGTGCCAATG	AAGAACGTCA	AAACTTGCAA	1620
CGTTATCGTA	GCCAGGACTT	GGCAAAAGCA	ATCTTACCAT	CTCTTGACAA	CCTTGAGCGT	1680
GCACATTGCA	TTGAAGGTTT	GACAGATGAT	GTGAAGAAGG	GCTTGGGGAT	GGTGCAAGAA	1740
AGCTTGATTC	ACGCTTGAA	AGAAGAAGGA	ATTGAAGAAA	TCGCAGCAGA	TGGCGAATTT	1800
GACCATAACT	ACCATATGGC	CATCCAAACT	CTCCCAGCAG	ACGATGAACA	CCCAGTAGAT	1860
ACCATCGCTC	AAGTCTTCA	AAAAGGCTAC	AAACTCCATG	ACCGCATCCT	ACGCCAGCA	1920
ATGGTAGTGG	TGTATAACTA	AGATATAAAAG	CCCGTAAAAAA	GCTCGCAGTA	AAAATAGGAG	1980
ATTGACGAAG	TGTTCGATGA	ACACAAGAAA	ATCTATCTTT	TTTACTCAGA	GCTTAGGGCG	2040
TGTTCGATTC	GGCAATTCTG	ACGGTAGCTA	AAGCAACTCG	TCAGAAAACG	GCAATCGCTA	2100
TGGCGTTTGC	CTAGCTTCCT	TACTAACTCG	TCGTCGAAAT	AAAATCGATT	TCGACTCCCTC	2160

852	
GTGTCGCAAT TTACATAATA GAAAACTTGT CCGAAACGAC AATAAACTAT GAAGAAAGAT	2220
AAAATATGTT TGGCTTGTA ATAGTGAGCG AAGCGAACCA AACACGATAC TCTTCGCCGT	2280
GGCGCTATTG GCGCAAATTT TGAGACCTTA GGCTCAAAGT TTAGTCAAAG AGATTGACGA	2340
AGTCAAGCTC TGACGGCGTC GCCACTGTCG CCACTTAAGA AGAGTATCAA AAAGAAAAAT	2400
AGAAAATTAA CTAACAAGGA GAAAAACACA TGTCTAAAAT TATCGGTATT GACTTAGGTA	2460
CAACAAACTC AGCAGTTGCA GTTCTTGAAG GAACTGAAAG CAAAATCATC GCAAACCCAG	2520
AAGGAAACCG CACAACCTCA TCTGTAGTCT CATTCAAAAA CGGAGAAATC ATCGTTGGTG	2580
ATGCTGAAA ACGTCAAGCA GTTACAAACC CAGATACAGT TATCTCTATC AAATCTAAGA	2640
TGGGAACCTTC TGAAAAAGTT TCTGCAAATG GAAAAGAATA CACTCCACAA GAAATCTCAG	2700
CTATGATCCT TCAATACCTG AAAGGCTACG CTGAAGACTA CCTTGGTGAG AAAGTAACCA	2760
AAGCTGTTAT CACAGTCCG GCTTACTTCA ACGACGCTCA ACGTCAAGCA ACAAAGACG	2820
CTGGTAAAAT TGCTGGTCTT GAAGTGAAC GTATTGTTAA CGAACCAACT GCAGCAGCTC	2880
TTGCTTATGG TTTGGACAAG ACTGACAAAG AAGAAAAAAAT CTTGGTATTT GACCTTGGTG	2940
GTGGTACATT CGACGCTCT ATCCCTGAAT TGGGTGACGG TGTCTTCGAC GTATTGTC	3000
CTGCAGGGGA CAAACAAACTT GGTGGTGACG ACTTTGACCA AAAAATCATT GACCACTTGG	3060
TAGCAGAATT CAAGAAAGAA AACGGTATCG ACTTGTCTAC TGACAAGATG GCAATGCAAC	3120
GTGGAAAGA TGCGGCTGAA AAAGCGAAGA AAGACCTTTC TGGTGTAACT TCAACACAAA	3180
TCAGCTTGCC ATTTATCACT GCAGGTGAGG CTGGACCTCT TCACTTGAA ATGACTTTGA	3240
CTCGTGCAGAA ATTTGACGAT TTGACTCGTG ACCTTGTGA ACGTACAAAAA GTTCCAGTTC	3300
GTCAAGCCCT TTCAGATGCA GGTGGAGCT TGTCAAGAAAT CGACGAAGTT ATCCTTGTG	3360
GTGGTTCAAC TCGTATCCCT GCCGTTGTTG AAGCTGTTAA AGCTGAAACT GGTAAAGAAC	3420
CAAACAAATC AGTAAACCCCT GATGAAGTAG TTGCTATGGG TGCGGCTATC CAAGGTGGTG	3480
TGATTACTGG TGATGTCAAG GACGTTGTCC TTCTTGATGT AACGCCATTG TCACTTGGTA	3540
TCGAAACAAT GGGTGGAGTA TTTACAAAAC TTATCGATCG CAACACTACA ATCCCAACAT	3600
CTAAATCACA AGTCTTCTCA ACAGCAGCG ACAACCAACC AGCCGTTGAT ATCCACGTT	3660
TTCAAGGTGA ACGCCAATG GCAGCAGATA ACAAGACTCT TGGACGCTTC CAATTGACTG	3720
ATATCCCAGC TGCACCTCGT GGAATTCCCTC AAATCGAAGT AACATTTGAC ATCGACAAGA	3780
ACGGTATCGT GTCTGTTAAG GCCAAAGACC TTGGAACCTCA AAAAGAACAA ACTATTGTCA	3840
TCCAATCGAA CTCAGGTTG ACTGACGAAG AAATCGACCG CATGATGAAA GATGCAGAAC	3900
CAAACGCTGA AGCCGATAAG AAACGTAAG AAGAAGTAGA CCTTCGTAAT GAAGTAGACC	3960

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AAGCAATCTT	TGCGACTGAA	AAGACAATCA	AGGAAACTGA	AGGTAAAGGC	TTCGACGCAG	4020
AACGTGACGC	TGCCCAAGCT	GCCCTTGATG	ACCTTAAGAA	AGCTCAAGAA	GACAACAAC	4080
TGGACGACAT	GAAAACAAAA	CTTGAGACAT	TGAACGAAAA	AGCTCAAGGA	CTTGCTGTTA	4140
AACTCTACGA	ACAAGCCGCA	GCAGCGCAAC	AAGCTCAAGA	AGGAGCAGAA	GGCGCACAAG	4200
CAACAGGGAA	CGCAGGGCAT	GACGTCGTAG	ACGGAGAGTT	TACGGAAAAG	TAAGATGAGT	4260
GTATTGGATG	AAGAGTATCT	AAAAAAATACA	CGAAAAGTTT	ATAATGATTT	TTGTAATCAA	4320
GCTGATAACT	ATAGAACATC	AAAAGATTTT	ATTGATAATA	TTCCAATAGA	ATATTTAGCT	4380
AGATATAGAG	AATTATATTA	GCTGAACATG	ATAGTTGTAT	CAAAAATGAT	GAAGCGGTAA	4440
GGAATTTTGT	TACCTCAGTA	TTGTTGTCTG	CATTTGTATC	GGCGATGGTA	CCGTATCTGA	4500
CGAACGTTCA	GCTTATAT					4518

(2) INFORMATION FOR SEQ ID NO: 122:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 8145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 122:

TGCTATTTTC	GATTCCCTTG	GGCGTTTGA	TTGCCTTGC	CTTGCAAGTC	CATTGGAAGC	60
CCCTCCATTA	TCTGATTAAC	ATTTACATCT	GGGTTATGCG	AGGAACCCCC	TTACTCTTGC	120
AACTGATTTT	TATCTATTAT	GTGCTCCCAA	GTATTGGAT	TCGTTTAGAC	CGCCTTCCTG	180
CAGCTATTAT	TGCCTTGTT	CTCAACTATG	CAGCTTACTT	TGCAGAAATT	TTCCGTGGGG	240
GAATTGACAC	TATTCCAAGA	GGACAGTATG	AGGCCGCCAA	GGTCTTGAAG	TTTAGCCCTT	300
TTGACAGAGT	GCGCTATATT	ATCTGCCCC	AAGTGCACAA	GATCGTTCTT	CCTAGTGTCT	360
TTAACATGAAGT	TATGAGTTTG	GTCAAGGATA	CTTCTTGTT	CTATGCTCTC	GGAATTCAG	420
ACCTTATCTT	GGCTAGTCGA	ACAGCTGCTA	ACCGCGATGC	TAGTCTAGTT	CCTATGTTCT	480
TGGCAGGAGC	CATTTATTTG	ATTTGATTG	GGATTGTGAC	AATTATTTCC	AAAAAAAGTTG	540
AGAAGAAAGTA	TAGTTATTAT	AGATAGGAGG	CTGCCATGTT	AGAATTACGA	AATATCAATA	600
AAGTCTTTGG	AGACAAACAA	ATCCTGTCTA	ATTCAGTCT	AAGTATTCC	AAAAAGCAAA	660
TCCTGGCTAT	CGTTGGACCT	TCTGGTGGAG	GTAAGACAAAC	TCTTTACGT	ATGCTTGCAG	720
GTCTTGAAAC	CATTGATTCA	GGGCAAATCT	TTTATAATGG	ACAACCTTA	GAGCTGGATG	780

854	
AATTGCAGAA GCGCAATCTA CTGGGATTTG TCTTCCAAGA TTTTCAACTA TTTCCATC	840
TATCAGTTCT GGAAAATTG ACTTTATCGC CTGTGAAGAC CATGGGAATG AAGCAGGAAG	900
AGGCTGAGAA GAAGGCGAGT GGACTCTTGG AACAGTTAGG ACTAGGAGGA CACGCAGAGG	960
CCTATCCTT CTCACTATCT GGTGGGCAAA AGCAGCGGGT GGCTTGGCG CGTGTATGA	1020
TGATTGACCC AGAAATCATT GGCTACGATG AACCAACTTC TGCCCTGGAT CCAGAATTAC	1080
GTTTGGAACTT GGAGAAGCTA ATCTTGCAAA ATAGGGAACT TGGGATGACC CAGATTGTGG	1140
TTACCCATGA TTTGCAGTTT GCTGAAAATA TCGCAGATGT ATTATTGAAA GTAGAACCTA	1200
AATAGGAGGA AAAATGGATG AAAAAATGGA TGCTTGTATT AGTCAGTCTG ATGACTGCTT	1260
TGTTCTTAGT AGCTTGCGG AAAAATTCTA GCGAAACTAG TGGAGATAAT TGGTCAAAGT	1320
ACCAGTCTAA CAAGTCTATT ACTATTGGAT TTGATAGTAC TTTTGTCCA ATGGGATTG	1380
CTCAGAAAGA TGGTTCTTAT GCAGGATTG ATATTGATT AGCTACAGCT GTTTTGAAA	1440
AATACGGAAT CACGGTAAAT TGGCAACCGA TTGATTGGGA TTTGAAAGAA GCTGAATTGA	1500
CAAAAGGAAC GATTGATCTG ATTTGGAATG GCTATTCCGC TACAGACGAA CGCCGTGAAA	1560
AGGTGGCTTT CACTAACTCA TATATGAAGA ATGAGCAGGT ATTGGTTACG AAGAACATCAT	1620
CTGGTATCAC GACTGCAAAG GATATGACTG GAAAGACATT AGGAGCTCAA GCTGGTTCAT	1680
CTGGTTATGC GGACTTTGAA GCAAATCCAG AAATTTGAA GAATATTGTC GCTAATAAGG	1740
AAGCGAATCA ATACCAAACC TTTAATGAAG CCTTGATTGA TTTGAAAAAC GATCGAATTG	1800
ATGGTCTATT GATTGACCGT GTCTATGCAA ACTATTATTT AGAAGCAGAA GGTGTTTAA	1860
ACGATTATAA TGTCTTACA GTTGGACTAG AAACAGAAGC TTTTGCCTT GGACCCGTA	1920
AGGAAGATAAC AAACCTGGTT AAGAAGATAA ATGAAGCTTT TTCTAGTCTT TACAAGGACG	1980
GCAAGTTCCA AGAAATCAGC CAAAAATGGT TTGGAGAAGA TGTAGCAACC AAAGAAGTAA	2040
AAGAAGGACAA GTAAGATAAA ATAGTGGCTG AAAC TGCGTT TTGATTAGCA AAACGTAGTT	2100
TTTTTGTAATCTAGGAAAA CGATAATAGC GATTGAATAT GGATAATTGA ATATGGAATA	2160
GCCCCACTGTG ATTTCTAAAA CATTGTAAA AATTGATTG ACTTCCAAAA TTAAATGTT	2220
CTGTAATGAA ATACTGATGT AACTGTTTA GGAACAATAA AACGCATAAT ATCAAGGTTT	2280
TTGCACCTTA CATTATGCGT TTTTGTGATT TTAAGACTTG TTAGCTGATT TTTTACAATC	2340
CTGCGAAATC TTTGATTCT TGTGCTGACA TTGAAGAGTC GCAACGGACG TTGATTGTC	2400
CATCTGTAAT ATGAACAAAA CCTGGTACAG TTGGGATTCC ATAGCGTGAG CGGAATGCTT	2460
GCAAATCATT GAGTTGGCTT GGTTCTTCAC TATTGATGAA GTAAATGTGA GCTTTGGTTT	2520
CAGCTACGAC ACCTGACAAT GTACCTGCAA ATTTACGGCA GTAAGGGCAA GTTTTGCGAC	2580

CGATAAAGAA GGTTGCAGTT TCTTTTTAT CAAGAGCTTC TTGCGCACGC ACAACTGTAG	2640
TGACTTCAAG GTCTTGATG TTATCTAAAA ATTGTTCCAT GAGATTACCT CGCTTTCATT	2700
GATAAGTCTA GTATGCCATA AAGTTCTAA AATTGCTTAG ATTTGATACG AAAAAAGATG	2760
AGGTTGGTTG GTCTCATCTT TTATAGGTCT TTATTTACA AATGCATTGA TTTCTGCTTC	2820
GATGTTAGCA ATCTTAGCTT GTGATTCTTC GTTGGTTCC CCTACAACGT CAATGTAGAA	2880
CTTGATTTT GGTTCTGTAC CTGAAGGGCG AACGGCAATC CATGAACCGT CAGCAAGTGT	2940
GTATTTCAAC ACATCACTTG GAGGAGTTGT CAAGTTGTAA ACAGTACCGT CAGCAACAGT	3000
AGCAGTTTGT GCCTTGAAGT CTTCTACGAC AGTGTAGCT GTTGCCTTCC ATTCTGTTGG	3060
AGCATTGTTG CGGAATTAG CCATAATCGC TTTGATTTGT TCAGCACCCTGCACACCTGA	3120
AAGAGTAACA GAGATTGTTT TTTCTGCGTA GTAGCCATAT TCTTTATAGA TTTCTTCGAT	3180
ACCGTCAGCA AGTGTCAAAC CACCGAGAACG GTAGTAGGCA GCAAGTTCAAG CAACTACAAG	3240
AACGGCTTGG ATGGCATCTT TATCACGTAC AAATGGTTA ATCAAGTAAC CGAAGCTTTC	3300
TTCAAATCCC ATCATGTAAG TGTGGTTGTG TTTTTCTTCG AATTCTTGGAA TTTTTTCAGC	3360
GATAAAATTG AAACCTGTCA AGACGTTGAA CATAGTTGCG CCGTAGCTTT CAGCAATCTT	3420
CGTTACCAAG TCAGTTGAAA CGATAGATTT GCAGAGAGCG GCATTTTCAG GAAGAGTTCC	3480
AGCGTTTTG TGAGCTTCCA AGATGTATTT AGCCATGATA GCACCGATTG GTTACCTGA	3540
AAGGTTGAGG TAGCTACCCT CTTTTGAAAG AACTCAACA CCAACACGGT CAGCGTCTGG	3600
GTCAGTTGCG ACAAGAACAT CTGCACCAAC TTGACGACCA AGTTCTTCAG CAAGGGCAAA	3660
GGCTGCTTGG CTTTCTGGGT TTGGAGATGT TACAGTTGAA AAGTCTGGGT CAGCAGTTGC	3720
TTGCGCTTCA ACAACTTGAA CAGAGTCAAA TCCTGCTTGG GCAAGAGCAC GACGAGCCAA	3780
CATTTCACCA GTACCATGAA GTGGTGTGTA GACAATCTTC ATGTCTTAC CAAATTCTTC	3840
AATCAAGGCT GGGTTGATGT TTATGTCCTT AACCTTTA AGGTATTCTA TGTCAACAGC	3900
TTCGCCGATA ACTTCAATCA AGCCAGAACG TTTTCAGTT TCCACATCAG CAACTCAAC	3960
TGCAAATGGG TTTTCGATTG CACGGATATA AGTAGTCAAA GCGTCCGCAT CGTGTGGAGG	4020
CATTTGTCCA CCGTCTTCAC CGTAAACCTT GTAAACCGTT AATGGAGCAG GGTTGTGGCT	4080
GGCTGTGACC ATGATACCTG CGAAACAGTT GAGATGACGA ACTGCAAATG ATAGTTCTGG	4140
AGTCGGACCA AGGCTTCAA ATACGTAAGA TTTGATGCCG TGTTTAGCAA GAACTGCCGC	4200
AGATTCAAAG GCAAACTCAG GTGAGAAGTG ACGGCTATCG TAGGCAATTG CTACACCGCG	4260
TTCTTTCTCG TTTCCACCTT TTGACTCAAT CAAACGAGCC AATCCTTCAG TAGCTTGGCG	4320

856	
AACAAACGTAG ATGTTGATAC GGTTGTACC AGCACCAACC AAGCCACGCA TACCTGCAGT	4380
ACCAAATTCA AGATTTGTAT AGAAGGCATC TTCCCTAGTT TTTTCGTCCA TATTTTCCAA	4440
ATCTTGACGA AGGTAGTCAC GAAGCTCCAC AAAATCAACC CATTCTGGT AATTTCTTG	4500
GTAAGACATT CAAATTCTCC TTTATTTTA AACACATTAA TCAGTTAAT TATATCATTT	4560
TTTTTAGTTT TAGTAAAACC TTATCTGCTT CGAACATCTC TTCAAACCGAG GTCAGATTGA	4620
ATTTTGGGGT TATATGATGT TGAGGCTAGG AAAAATTCAA TTTCAGTAAA AAAAGTAAGT	4680
CTTCTCATAA CAAAACATTG ATATAGTTAC TTAGTTTAA ACAAGCATAT TATAATAAAG	4740
CTATGGCATA TAGTACTGAT TTTAACAGC GAGCATTAGA TTACATCAA GAGGGGCACA	4800
GCCATGTCGA GCCAGCCAAG TTTTTGCTG TTGGCGTCAG AACTCTCTC ACGTGGAAA	4860
AGAAAGACGT GAACAAGAAC ACATAGAGAG GAAAAAGCGA GTCGTAAAA ACCGAAAGAT	4920
TCCTTTAGAG GAATTGAAAG CCTTTGTAGA GGCTCATCCA GATGCTTTT TACGGGAAAT	4980
TGCGGCACAT TTTGATTGTG CTGTTCCCTC AGTATGGCA GCTTTAAAGC AGATTAAGGT	5040
CACTTTAAAA AAAGATGACG AGCTTTAAGG ACAAGACCC AGAAAAGTAG CCTTATTCT	5100
TAAGAATTAA AATAGTTAA AGCACCTAGC ACCTGTTTAT ATTGATGAAA CAGGAATCGA	5160
CCGCTATCTC TATCGTCCTT ATGCAGGGC TCCTAGAGG GAGAAAGTCT ATGAAAAGAT	5220
TAGCGGACGT CGTTTGAGC GAACTCAAT TGTTGCAGGA CAAGTAGACG GAGAGTTAT	5280
AGCTCCCAGT ATTTACAAGA AAACCATGAC AAGCGATTTT TTTGTGGAGT GGTCAAAAC	5340
GCAACTCCTA CCTGCTTGA AGACACCTCA TGTTATTGTC ATGGCAATG CTGGTTTCA	5400
TCCCAAGAAC ATTTGGATG AACTCTGCAT CCAAGATAAA CACTTTCT TACCTCTACC	5460
ACCTTATTCA CCGGATTGTA ATCCTATTGA GCAAGCTGG GCTATCTGA AAAAGAAAGT	5520
GACGGATGTA TTAAGGGAAG TTCCAACAT TTTGAATGT TTGGAATGCT TTTTAAAC	5580
TAGATGACTA TAACGGTTCT AAAGGAACCT ATCGAGTAGT CATTAAACT AAGGATACTG	5640
CTGGTTAAGA GAAGACGGTA TACAATCAAA CCATTACCG TGAGCCGAA ATCGTTCAGA	5700
ATGAAGACTT GTATCAGAAT GAAGACTTGT ATAAGAAAGG TTTGAATGTT GAACTTGC	5760
ACCAACAAAT TAAGGGATT TTTGAAGCAG AGTTAAAAAA TCGTATTAAT GGAGTTCTTA	5820
ATACTAAAT AAAAATAGT ACATTAATC GTGAAATAA AAAAATATA CACCAGAGCA	5880
ACAAAAACTC CATGATCAAT TTGAAGCAGA AGCAACGGAA GATGCTAAA AACAGGC	5940
TATTGTGTTG AATGTTGACC AGGATTCAT GAGCATATCT AAGTCTAATA AAAGTGGTTC	6000
AGACTGGAAG AAAACTTCA CAGTGAGGAT AACCAATAGG CTAGCAAATG ACTTGAATAA	6060
TGTCTTGAAA CAGGTTGATA AAGATACTCC TAATACCCCA ACTTGGCTAA ACTCAGCTGC	6120

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TTCTAAAGCT	AAAGATGATG	ACAGAGTATA	AAAATCTG	AAGACTCTTA	TACCAGGAGA	6180
AAATTACCTA	TCATGTTAAG	GATAATCAGC	TAGAAGTAGA	AACAGATAAA	TACACATATA	6240
CTGCCGCTAG	AAATGGTAGT	AAGGAAGTTG	GTATTCAAGA	GTCAGATATA	GCAGCAACTC	6300
TAAGTGCCGA	TGAATATAAT	TCTAATCGCC	AAACTTTGA	GAGAGAATAC	AAATACAAAA	6360
GCAAATGCC	TTAATAATGG	TTGGGCTAGA	TCTGGTTCTG	AAGAGTTCAA	AAAGTTCTCC	6420
CACTTTGTAG	GGGTAGACAA	AGGGATTGTG	CGAACGAATG	TACTGACTGG	TAAAAAACTA	6480
TCTGATAAGA	TTAGGAAAGA	AGTGGCTCT	GGAGATAGCA	AACTAGGAAA	AGGCGGCTAT	6540
TTCTCTACTG	GGGATGTTCT	ATTAGGAAA	GATGTTGTT	CTTATACCGT	ACAAGTATTT	6600
TCAGAGAATA	ATGAAAGAGT	AGGAGTAAAC	ACTCAAAGTC	ACCGTGTCA	GTATAATCTC	6660
CCAATTCTAG	CTGACTTTTC	AGTCATCCAA	GATACTGTGG	AACCACAGC	AACCGTTGTT	6720
GAAAAAAATCA	TTCCAAAACT	AAATATTCCC	GAAGAAGAGA	AAGGGAAAAT	AACCGAAGAA	6780
ATCAAGAAAA	AGAAAAAAAC	CTCAGAATTG	GCAGAACTAA	TCTCAGAAAA	TGTGAAAGTT	6840
CGCTATGTTG	ATGAACAAGG	GCGTTTGCTA	TCATTGAAAA	ATGATACTGG	AATTGGAGAA	6900
AAAGAAAGTG	ACGGAACCTA	CATTACCAAT	AAAAAACAAAC	TGATTGGTAC	CAGCTATAAT	6960
GTCACAGATA	AAAAACTCG	TAGCATGACT	ACTACTGACG	GAAAATATTA	TACTTTAAA	7020
GAAGCAGATA	CAAATTCTGC	AAAGTTAACT	GGGAATATTG	TAAGCGAAGG	TAGAACAGTG	7080
ACCTTAGTTT	ATAGAGAAAG	CGAAGCGCCA	ACCACTGCTA	CAGTAACAGC	CAATTACTAT	7140
AAAGAAGGTA	GGCAAGAGAA	GTTGGTAGAG	TCTGTTATAA	AAGCTGATTT	AGCGATAGGT	7200
TCTGAGTATA	CCACAGAATC	AAAAACTATT	GAAGGGAAAA	CAACAACTGA	GGACAAAGAA	7260
GACCGAGTTA	TCACAAGGAA	AACAACATAC	ACCTTGGTAG	CAACTCCTGA	AAATGCGTAC	7320
CAGAAGACGG	TGCAACAGTT	GACTATTACT	ACCGTGAGAA	TGTTGAGGAA	ACAGTGGTTC	7380
CCAAAACAGC	AACCTCTACT	GAGACGAAGA	CTATAACGCG	TATCATTATC	TACGTTGATA	7440
AAGTTACGAA	CCAAAATGTA	AAAGAAGATG	TTGTTCAACC	TGTAACCTTA	AGCCGTACAA	7500
AAACTGAGAA	CAAGGTCACG	GGAGTTGTA	CCTACGGTGA	ATGGACAACA	GGAAACTGGG	7560
ACGAGGTTAT	ATCTGGTAAG	ATTGACAAGT	ACAAAGATCC	AGATATTCCA	ACAGTTGAAT	7620
CACAAGAAGT	TACGTCAAGAC	TCTAGTGATA	AAGAAATAAC	GGTAAGGTAT	GACCGTTTAT	7680
CAACACCAGA	AAAACCAATC	CCACAACCAA	ATCCAGAGCA	TCCAAGTGT	CCGACACCAA	7740
ACCCAGAACT	ACCAAATCAA	GAGACTCCAA	CACCAGATAA	ACCAACTCCA	GAACCAGGTA	7800
CTCCAAAAAC	TGAAACTCCA	GTGAATCCAG	ACCCAGAACT	TCCGACTTAT	GAGACAGGTA	7860

858	
AGAGAGAGGA ATTGCCAAC ACAGGTACAG AAGCTAATGC TACCTGGCT AGTGCTGGTA	7920
TCATGACCTT GTTAGCTGGT CTAGGATTAG GATTTTCAA GAAAAAAAGAA GATGAAAAAT	7980
AATAGATTT AGAATCTAGG ACCAGGAAA AGCTCACAGA TGTGGGCTTT TTTCTGGTT	8040
TTGAGAACCGA GGTCTTCGT AAAGAATAAA AACGCTTACA AGTCTGTTGA ACTGGGAAAC	8100
TATGAATCCT ATTTTTTAA AAATATTCC AGAAATCAGT TGCAG	8145

(2) INFORMATION FOR SEQ ID NO: 123:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 8697 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 123:

CGGTACCGGG AACGATACTT AGTCTAATTG TGCACCTTTT CCATGTATGG TAAAGGTTTT	60
TCTTTTTTTA AAAAGGAAA CGAGAACAGG AGGTTCTTAT GAAAGCAAGC ATTGCCTTGC	120
AAGTTTTACC CCTAGTACAG GGGATTGATC GGATAGCTGT TATTGATCAG GTCATTGCTT	180
ATCTGCAwAC TCAAGAACGT ACGATGGTAG TGACACCATT TGAAACGGTC TTGGAAGGGG	240
AGTTTGATGA GCTTATGCGC ATTCTAAAAG AACGCGCTGGA AGTGGCAGGG CAGGAGGCAG	300
ACAATGTCTT TGCCAATGTC AAAATAATG TAGGAGAGAT TTTAAGTATT GATGAGAAC	360
TTGAGAGTA TACTGAGACG ACACATTAGT CTATTGGCT TTCTCGGAGT ATTGTCAATC	420
TGGCAATTAG CAGGTTTCT TAAACTTCTC CCCAAGTTA TCCTGCCGAC ACCTCTTGAA	480
ATTCTCCAGC CCTTTGTCG TGACAGAGAA TTCTCTGGC ACCATAGCTG GGCGACCTTG	540
AGAGTGGCTT TACTGGGCT GATTTGGGA GTTTGATTG CCTGTCTTAT GGCTGTGCTC	600
ATGGATAGTT TGACTTGGCT CAATGACCTG ATTTACCTA TGATGGTGGT CATTCAAGACC	660
ATTCCGACCA TTGCCATAGC TCCTATCCTG GTCTTGTGGC TAGTTATGG GATTTGCCC	720
AAGATTGTCT TGATTATCTT AACGACAACC TTCCCACATCA TCGTTAGTAT TTTGGACGGT	780
TTTAGGCATT GCGACAAGGA TATGCTGACC TTGTTTAGTC TGATGCGGGC CAAGCCTTGG	840
CAAATCCTGT GGCATTTAA AATCCCAGTT AGCCTGCCTT ACTTTATGC AGGTCTGAGG	900
GTCAGTGTCT CCTACGCCTT TATCACAACG GTGGTATCTG AGTGGTTGGG AGGTTTGAA	960
GGTCTTGGTG TTTATATGAT TCAGTCTAAA AACTGTTTC AGTATGATAC CATGTTGCC	1020
ATTATTATTC TGGTGTGCGAT TATCAGTCTT TTGGGTATGA AGCTGGTCGA TATCAGTGA	1080
AAATATGTGA TTAAATGGAA ACGTTCGTAG AATTAGAATG TTTCTGAAAA AGAAAAGAGG	1140

AAATCAAAAT	GAAGAAAACA	TGGAAAGTGT	TTTTAACGCT	TGTAACAGCT	CTTGTAGCTG	1200
TTGTGCTTGT	GGCCTGTGGT	CAAGGAAC TG	CTTCTAAAGA	CAACAAAGAG	GCAGAACTTA	1260
AGAAGGTTGA	CTTTATCCTA	GACTGGACAC	CAAATACCAA	CCACACAGGG	CTTTATGTTG	1320
CCAAGGAAAA	AGGTTATTC	AAAGAAGCTG	GAGTGGATGT	TGATTTGAAA	TTGCCACCAG	1380
AAGAAAGTTC	TTCTGACTTG	GTTATCAACG	GAAAGGCACC	ATTTGCAGTG	TATTTCCAAG	1440
ACTACATGGC	TAAGAAATTG	AAAAAGGAG	CAGGAATCAC	TGCCGTTGCA	GCTATTGTTG	1500
AACACAATAC	ATCAGGAATC	ATCTCTCGTA	AATCTGATAA	TGTAAGCAGT	CCAAAAGACT	1560
TGGTTGGTAA	GAAATATGGG	ACATGGAATG	ACCCAACTGA	ACTTGCTATG	TTGAAAACCT	1620
TGGTAGAATC	TCAAGGTGGA	GACTTTGAGA	AGGTTGAAAA	AGTACCAAAT	AACGACTCAA	1680
ACTCAATCAC	ACCGATTGCC	AATGGCGTCT	TTGATACTGC	TTGGATTTAC	TACGGTTGGG	1740
ATGGTATCCT	TGCTAAATCT	CAAGGTGTA	ATGCTAACTT	CATGTA	TTGAACTATG	1800
TCAAGGAGTT	TGACTACTAT	TCACCA	CGTAA	CAACGACTAT	CTGAAAGATA	1860
ACAAAGAAGA	AGCTCGAAA	GTCATCCAAG	CCATCAAAA	AGGCTACCAA	TATGCCATGG	1920
AACATCCAGA	AGAAGCTGCA	GATATTCTCA	TCAAGAATGC	ACCTGA	ACTC AAGGAAAAC	1980
GTGACTTTGT	CATCGAATCT	CAAAAATACT	TGTCAAAGA	ATACGCA	AGC GACAAGGAAA	2040
AATGGGGTCA	ATTGACGCA	GCTCGCTGGA	ATGCTTTCTA	CAAATGGGAT	AAAGAAAATG	2100
GTATCCTTAA	AGAAGACTTG	ACAGACAAAG	GCTTCACCAA	CGAATTG	TG AAATAATGAC	2160
AGAAATTAGA	CTAGAGCACG	TCAGTTATGC	CTATGGTCAG	GAGAGGATT	TAGAGGATAT	2220
CAACCTACAG	GTGACTTCAG	GCGAAGTGGT	TTCCATCCTA	GGCCCAAGTG	GTGTTGGAAA	2280
GACCACCCCTC	TTTAATCTAA	TCGCTGGGAT	TTTAGAAGTT	CAGTCAGGGA	GAATTGTCCT	2340
TGATGGTGA	GAAAATCCC	AGGGCGCGT	GAGTTATATG	TTGCAAAGG	ATCTGCTCTT	2400
GGAGCACAAG	ACGGTGCTTG	GAAATATCAT	TCTGCCCTC	TGATTCAA	AGGTGGATAA	2460
GGCAGAAGCT	ATTCCCAG	CGGATAAAAT	TCTTGC	GACC	TGA CAGCTGAAG	2520
AGACAAGTAT	CCTCATGAAC	TTAGCGGTGG	GATGCGCCAG	CGTGTAGCCT	TACTCCGGAC	2580
CTACCTTTT	GGGCACAAGC	TCTTCTCTT	AGATGAGGCC	TTAGCGCCT	TGGATGAGAT	2640
GACAAAGATG	GAAC	CTTGGTATCT	TGAGATTCA	AAGCAGTTGC	AGCTAACAAAC	2700
CCTGATCATC	ACGCATAGTA	TTGAGGAGGC	CCTCAATCTC	AGCGACCGTA	TCTATATCTT	2760
GAAAATCGC	CCTGGGCAGA	TTGTTTCAGA	AATTAAACTA	GATTGGCTG	AAGATGAGGA	2820
CAAGGAAGTC	CAAAAGATTG	CCTACAAACG	TCAAATTG	GC	GGAAATTAG GCTTAGATAA	2880

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GTAGAAAAAT	AGGGAGTTGG	TGAAGATTAT	CCTTTACCAAG	CGCCCTTTT	CTTTTAAAAAA	2940
TGAGAAAATT	TCGGTATAAT	AGTCAAACAA	GGTCAAGGTT	TAAAGAGAGA	GGTGGGTTG	3000
TTATGAGATT	TAAAAATACA	TCGGATCATA	TTGAGGCCTA	CATCAAGGCG	ATTTTAGATC	3060
AATCTGGTAT	CGTGGAGTTG	CAACGGAGTC	AGTTGGCAGA	TACCTTCAG	GTTGTTCCCTA	3120
GTCAGATTAA	CTACGTGATC	AAGACACGCT	TTACGGAAAG	TAGAGGCTAC	TTGGTTGAAA	3180
GTAAGCGTGG	TGGCGGAGGC	TACATTGTA	TAGGACGGAT	TGAGTTTCT	AGTCATCATG	3240
AAATGCTCCG	GGAGCTGCTT	TACTCGATTG	GTGAGCGAGT	CAGTCAAGAA	ATTTATGAGG	3300
ATATTCTCCA	GCTTTGGTT	GAGCAGGAAT	TGATGACCAA	GCAGGAGATG	AATTTGCTAG	3360
AATCAGTAGC	TTGGGATCGC	GTTCCTAGGAG	AAGAAGCTCC	AGTTGTTCGA	GCAAACATGC	3420
TACGTCAGAT	CATACAAGAG	GTAGATAGAA	AAGGAAAGTA	AGATGAACTA	TTCAAAAGCA	3480
TTGAATGAAT	GTATCGAAAG	TGCCTACATG	GTTGCTGGAC	ATTTTGGAGC	TCGTTATCTA	3540
GAGTCGTGGC	ACTTGTGAT	TGCCATGTCT	AATCACAGTT	ATAGTGTAGC	AGGGCAACT	3600
TTAAATGATT	ATCCGTATGA	GATGGACCGT	TTAGAAGAGG	TGGCTTGGA	ACTGACTGAA	3660
ACGGACTATA	GCCAGGATGA	AACCTTTACG	GAATTGCCGT	TCTCCCGTCG	TTTGCAGGTT	3720
CTTTTGATG	AAGCAGAGTA	TGTAGCGTCA	GTGGTCCATG	CTAAGGTACT	AGGGACAGAG	3780
CACGTCCCTCT	ATGCGATTTT	GCATGATAGC	AATGCCTTGG	CGACTCGTAT	CTTGGAGAGG	3840
GCTGGTTTT	CTTATGAAGA	CAAGAAAGAT	CAGGTCAAGA	TTGCTGCTCT	TCGTCGAAAT	3900
TTAGAAGAAC	GGGCAGGCTG	GACTCGTAA	GATCTCAAGG	CTTACGCCA	ACGCCATCGT	3960
ACAGTAGCTG	ACAAGCAAAA	TTCTATGGCC	AATATGATGG	GCATGCCGCA	GAECTCCTAGT	4020
GGTGGTCTCG	AGGATTATAC	GCATGATTG	ACAGAGCAAG	CGCGTCTGG	CAAGTTAGAA	4080
CCAGTCATCG	GTCGGGACAA	GGAAATCTCA	CGTATGATTC	AAATCTTGAG	CCGGAAGACT	4140
AAGAACAAACC	CTGTCTGGT	TGGGGATGCT	GGTGTGGGA	AAACAGCTCT	GGCGCTTGGT	4200
CTTGCCCAGC	GTATTGCTAG	TGGTGACGTG	CCTGCGAAA	TGGCTAAGAT	GCGCGTGTAA	4260
GAACTTGATT	TGATGAATGT	CGTGTGAGGG	ACACGCTTCC	GTGGTACTT	TGAAGAACGC	4320
ATGAATAATA	TCATCAAGGA	TATTGAAGAA	GATGGCCAAG	TCATCCTCTT	TATCGATGAA	4380
CTCCACACCA	TCATGGGTT	TGGTAGCGGG	ATTGATTGCA	CTCTGGATGC	GGCCAATATC	4440
TTGAAACCAG	CCTTGGCGCG	TGGAACCTTG	AGAACGGTTG	GTGCCACTAC	TCAGGAAGAA	4500
TATCAAAAC	ATATCGAAAA	AGATGCGGCA	CTTTCTCGTC	GTTCGCTAA	AGTGACGATT	4560
GAAGAACCAA	GTGTGGCAGA	TAGTATGACT	ATTTTACAAG	GTTTGAAGGC	GACTTATGAG	4620
AAACATCACC	GTGTACAAAT	CACAGATGAA	GCAGGTTGAAA	CAGCGGTTAA	GATGGCTCAT	4680

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CGTTATTTAA	CCAGTCGTCA	CTTGCCAGAC	TCTGCTATCG	ATCTCTTCCA	TGAGGCGGCA	4740
GCAACAGTGC	AAAATAAGGC	AAAGCATGTA	AAAGCAGACG	ATTCAGATTT	GAGTCCAGCT	4800
GACAAGGCC	TGATGGATGG	CAAGTGGAAA	CAGGCAAGCCC	AGCTAATCGC	AAAAGAAAGAG	4860
GAAGTACCTG	TCTACAAAGA	CTTGGTGACA	GAGTCTGATA	TTTTGACCAC	CTTGAGTCGC	4920
TTGTCAGGAA	TCCCAGTCA	AAAAGTACT	CAAACGGATG	CTAAGAAGTA	TTTAAATCTT	4980
GAAGCAGAAC	TCCATAAACG	GGTTATCGGT	CAAGATCAAG	CTGTTTCAAG	CATTAGCCGT	5040
GCCATTGCGC	GCAACCAGTC	AGGGATTGCG	AGTCATAAGC	GTCCGATTGG	TTCCCTTATG	5100
TTCCTAGGGC	CTACAGGTGT	CGGGAAAAGT	GAATTAGCCA	AGGCTCTGGC	AGAAGTTCTT	5160
TTTGACGAGC	AATCAGCCCT	TATCCGCTTT	GATATGAGTG	AGTATATGGA	GAAATTGCA	5220
GCTAGTCGTC	TCAACGGAGC	TCCTCCAGGC	TATGTTAGGAT	ATGAAGAAGG	TGGGGAGTTG	5280
ACAGAGAACG	TTCGCAATAA	ACCCATTCC	GTCTCCTCT	TTGATGAGGT	AGAGAACGCC	5340
CACCCAGATA	TCTTTAATGT	TCTCTTGAGC	GTCTGGATG	ACGGTGTCTT	GACAGATAGC	5400
AAGGGACGCA	AGGTCGATTT	TTCAAATACC	ATTATCATTA	TGACATCGAA	TCTAGGTGCG	5460
ACTGCCCTTC	GTGATGATAA	GAATGTTGGT	TTTGGGCTA	AGGATATTG	TTTGACCCAG	5520
GAAAATATGG	AAAAACGCAT	TTTGAAGAA	CTGAAAAAAAG	CTTATAGACC	GGAATTTCATC	5580
AACCGTATTG	ATGAGAACGGT	GGTCTCCAT	AGCCTATCTA	GTGATCATAT	GCAGGAAGTG	5640
GTGAAGATTA	TGGTCAAGCC	TTTAGTGGCA	AGTTTGACTG	AAAAAGGCAT	TGACTTGAAA	5700
TTACAAGCTT	CAGCTCTGAA	ATTGTTAGCA	AATCAAGGAT	ATGACCCAGA	GATGGGAGCT	5760
CGCCCACCTTC	GCAGAACCCCT	GCAAAACAGAA	GTGGAGGACA	AGTTGGCAGA	ACTTCTCTC	5820
AAGGGAGATT	TAGTGGCAGG	CAGCACACTT	AAGATTGGTG	TCAAAGCAGG	CCAGTTAAAA	5880
TTTGATATTG	CATAAAAGAA	AAAAAGTATC	AGCATCTGAC	CATAAGTCAC	AGTGGAGTGA	5940
AATTCAATGA	AAATCAAAGA	GCAAACACTAG	CAGCTAGCCG	CAGGTTGCTC	AAAACACTGG	6000
TTTGAGGTTG	CAGATAGAGC	TGACGTGGTT	TGAAGAGATT	TTCGAAGAGT	ATGAAACTAA	6060
AACCTATAGC	TTCTAAACGA	TCCGTGGTTT	TCATCATTCA	ACACAAAATT	CATATGTTA	6120
TTACCCCTCCG	TCGTATTTGT	CTTAGAGCGT	GTGTAGTAGA	AAAAGAGCAG	TCTTATCTGA	6180
AATTTTATT	CTTCAAAAG	AGACCTGTTT	CTTTTTGCA	TGTCAAATCC	GTTCTAGCTG	6240
GTATTTGAAA	AATCAAACCA	ATATTCAATG	AAAATCAAAG	AACAAACACTAG	GAAGCTAGCC	6300
GCAGGTTGCT	CAAAACACTG	TTTGAGGTTT	GTAGATAGAG	CTGACGTGGT	TTGAAGAGAT	6360
TTTCGAAGAG	TATAAGCTGC	AAGATGAATG	ATTTCTTGT	ATTGACGTTG	TTGTTGACAA	6420

862	
AAAGTAGCGG ATAAATGAAA TCCATTCCAT TATCATAGAT GATAGGCTGG TAGGAAATTT	6480
TCAAATAGCA TACAGGAAAT AGATGTATGG AGTTCTGGTA GTAGAAAGGG AGAGAGATGA	6540
ACATTTAGT TGCAGATGAC GAGGAAATGA TTAGAGAAGG AATTGCAGCA TTTCTGACAG	6600
AAGAGGGTTA TCATGTCATT ATGGCTAAGG ATGGACAAGA GGTCTGGAA AAATTTCAAG	6660
ATCTCCCTAT CCATCTCATG GTACTGGATT TAATGATGCC TAGGAAGAGT GGTTTGAAAG	6720
TGTTAAAAGA AATCAATCAA AAGCACGATA TTCCTGTCAT CGTCTGAGT GCTCTGGAG	6780
ATGAAACTAC TCAGTCACAG GTATTTGATC TCTATGCTGA TGATCATGTG ACAAAACCTT	6840
TTTCTTGTT ACTGCTTGTG AAGCGTATTA AGGCCTTAT CAGACGTTAC TACGTCATAG	6900
AGGATCTTG GCGATATCAG GATGTAACAG TGGATTTAC CTCTTACAAA GCACATTATA	6960
AAAATGAAGA AATTGATCTC AAACCAAAGG AATTACTGGT ACTAAAGTGT TTGATTTCAGC	7020
ATAAAATCA AGTTTAAGT AGAGAGCAGA TATTGGAAGA AATTTCAAAAA GATGTAGCTG	7080
ATTTACCTTG TGATAGGGTC GTTGATGTCT ATATTGTCAC TCTTCGCAAA AAATTAGCTT	7140
TAGATTGTAT CGTGACTGTG AAAAAATGTTG GGTATAAGAT TAGCTTATGTA TAAAAAATCC	7200
TAAATTATTA ACCAAGTCTT TTTTAAGAAG TTTTGCAATT CTAGGTGGTG TTGGTCTAGT	7260
CATTCAATATA GCTATTATT TGACCTTTCC TTTTTATTAT ATTCAACTGG AGGGGGAAAA	7320
GTTTAATGAG AGCGCAAGAG TGTTTACGGA GTATTTAAAG ACTAAGACAT CTGATGAAAT	7380
TCCAAGCTTA CTCCAGTCTT ATTCAAAGTC CTTGACCATA TCTGCTCACC TTAAAAGAGA	7440
TATTGTAGAT AAGCGGCTCC CTCTTGTGCA TGACTTGGAT ATTAAAGATG GAAAGCTATC	7500
AAATTATATC GTGATGTTAG ATATGTCTGT TAGTACAGCA GATGGTAAAC AGGTAACCGT	7560
GCAATTGTT CACGGGGTGG ATGTCTACAA AGAAGCAAAG AATATTGTC TTTTGATCT	7620
CCCATATACA TTTTGTTA CAATTGCTTT TTCCTTGTT TTTTCTTATT TTTTACTAA	7680
ACGCTTGCTC AATCCTCTT TTTACATTTC AGAAGTGACT AGTAAATGC AAGATTTGGA	7740
TGACAATATT CGTTTGATG AAAGTAGGAA AGATGAAGTT GGTGAAGTTG GAAAACAGAT	7800
TAATGGTATG TATGAGCACT TGTTGAAGGT TATTTATGAG TTGGAAAGTC GTAATGAGCA	7860
AATTGTAAAA TTGCAAAATC AAAAGGTTTC CTTTGTCCGC GGAGCATCAC ATGAGTTGAA	7920
AACCCCTTTA GCCAGTCTTA GAATTATCCT AGAGAATATG CAGCATAATA TTGGAGATTA	7980
CAAAGATCAT CCAAAATATA TTGCAAAGAG TATAAATAAG ATTGACCAGA TGAGCCACTT	8040
ATTAGAAGAA GTACTGGAGT CTTCTAAATT CCAAGAGTGG ACAGAGTGTG GTGAGACCTT	8100
GACTGTTAAG CCAGTTTAG TAGATATTTT ATCACGTTAT CAAGAATTAG CTCATTCAAT	8160
AGGTGTTACA ATTGAAAATC AATTGACAGA TGCTACCAGG GTCGTCATGA GTCTTAGGGC	8220

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ATTGGATAAG GTTTGACAA ACCTGATTAG TAATGCAATT AAATATTCAAG ATAAAAATGG	8280
GCGTGTAAATC ATATCCGAGC AAGATGGCTA TCTCTCTATC AAAAATACAT GTGCCCTCT	8340
AAAGTGACCAA GAACTAGAAC ATTATTTGA TATATTCTAT CATTCTCAAA TCGTGACAGA	8400
TAAGGATGAA AGTTCCGGTT TGGGTCTTAA CATTGTGAAT AATATTTAG AAAGCTATCA	8460
AATGGATTAT AGTTTCTCC CTTATGAACA CGGTATGGAA TTTAAGATTA GCTTGTAGAC	8520
AGATTAGTTT TTTATTAAG TTCATATAGG GTTAACATAA GTGTGTTATT CTTTGTGTAG	8580
ATAAAAGAAA GGATACTAAT ATGGTATTAG CGATTATTTT AGTAACATTC TTTATTCGAT	8640
TGATTTTTAA AAAGCGTTCG ATAGAGAATG AGAACAGAAT CCTTAGCAAT GGCGGGG	8697

(2) INFORMATION FOR SEQ ID NO: 124:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 124:

AACCATAACAT ACGGCAAGGC AAAGCTGACG CGGTTGAAAG AGATTTCGA AGAGTATTAG	60
TTGCCTTAA AGGCATCCAC CATCGTTGA AATTCTTCAT TTGAGAGAGT AATCCCTTG	120
CCCATTTAG TATGGTCTGG ACTCCAAGCA CGAATATCAA ACTTTGCAGG GGCACCATTA	180
AAGCTCACAC GGTTAATTTC CTTGGTCCAA CCTTTTCGT TTTCAGAAAG AGTCAACAAG	240
TGCTCTTCGA TTTCAAATGT AAATTCTGCC ATTTTCTTCT CCTTTTTAG TTTCATTAGT	300
TTATTCGTAAT AATCTTGTAG ATTTTAGGAA AATTTTATAT AATATTGATA TAAAAGAAGG	360
GAGGCCAATA TGAGACATAA ATTCCAGCAA GTTCTAAATA AAATACATGA TTTTTAAAT	420
GGATATGACC AACCTGACCA GACTGAAACC AACTCCCTTA CAGCCACTAT TGAAGAGGCT	480
ATCCAGAAAC AAACCGCTGT TCACCTTATC TTGTCTGAGA CAAGCTTAC AGGTGACATC	540
ATCAAATATG ATCAGCAAGG CCAGCAAATT ATCGTAAAAA ATTTTCCAA AAATGTGAGC	600
CGGATTATCC GTATAAGCGA TATTCAACGC CTGCGATTTG TCCCCTCAAC TGTCAAACA	660
GCCCCAAAAA ATAGATTAA GAAAGACTGA GATGTAGTTG CTTCATCCCA CTCTTTTTC	720
TTAGCGAATT TGTTCAAAAT GTAAATGAAC TGCGATATGA TCTCCATAAC CACTTCTTTC	780
CAAGTCACGT TGTAAACGAT AGGAAATGTA GTGTTCTGCA ATGGTAATGT AACCTGCGCC	840
CAATAAACGA TGTTCAACCA TAGATTGAAT CATACTGATA GTCGCACGTT CCACCTTGGC	900

864	
TTCTTGAAA TCCAAAACCA CCTTCTTAGT GACTTGAGCA AGATTTGAC GCAAATCATC	960
TGTCAAAACA TAAACAGTTT GGGCTGCCCT CAAGATGGCT TGGTAAATCT TATCTGGATT	1020
AAATTTCAGCA ATTTGCCAT TACGTTGAT TACTTGCATA GGTTTCTCCT TTATTCTTG	1080
TTTTCTTGAT TTTCTGCCAG CATTTCCTCT TCTTCTACTG TCAGTTGATA ATGTTCAAGT	1140
AAATCCGGTC TGCGCTCGTA GGTTTCTTT AAACCTCGT ACAATCGCCA CTGACGAATC	1200
TTTTCATGGT GGCCACTCAT CAATACATCT GGCAAGACCA TGCTCGATA ATCATAGGGA	1260
CGTGTGTACT GAGGATATTC TAAAAGACCT GAAGAAAAAC TATCATCTTG GTGGCTAGAC	1320
TCCTTGCCAA TCACTTCTGG AATCAGGCGA ACTGTAGCAT CAATCATGGT CATAGCTGCC	1380
AATTCTCCAC CAGTGAGGAC ATAGTCACCT AGGGAAATCT CATCTGTTAC CAAGGTCTTA	1440
ATGCGCTCAT CATAACCCCTC ATAGTGCCCA CAGATAAAGA TTAGCTCTTC CTCTTGAGCC	1500
AAATCTTCAG CATAAGCCTG ATCAAACACTGC TTTCCAGCAG GATCAAGGAG AATAACGCGC	1560
GGATTTTCTT TTTCAATAGC ATCAAAGGAA TCGAAAATAG GTTGTGCTCT GAGCAACATG	1620
CCCTGACCGC CTCCGTAGGG CTCATCATCT ACATGACGGG CCTTTTCAGC ATTTCTCGA	1680
AAATTATGAT ACTGGATATC CAAGAGCCCT TTTTCTCGAG CCTTTCCAAC GATTGAGTGC	1740
TCCAGTGGAG AAAACATCTC TGGAAAGAGG GTTAAAATAT CAATCTTCAT CGTCTAACCC	1800
TTCTAAGATT TCCACATCGA CCCGTTACT TGGAATATCA ACATTGAGAA CCACTGGTGG	1860
GATATAAGGT AAAAGCAAAT CACGTTGCC TTTTCGTTTG ACCACCCAGA CATCATTAGC	1920
ACCTGGTTGC AGGATTTCT TGATGGTTCC AACCAAGCTA TCACCCCTCAT AGACTTCCAA	1980
ACCGATAATC TCGTGTAGT AAAATTCAACC ATCGTCTAGG TCATTCAAAT CTTCCCTCAGC	2040
GACCTTGAGA CTGTATCCCT TGTACTTTTC GATAGTATTG ATATGGTACA TATCTTGAA	2100
TTTAATAATG TCAAAGTTCT TCTGTTACG GTGGCTAGCG ATGGTCACTG TTTGGACAAA	2160
CTGATCTTTT TCATCAAACA AAACCAGCTC AGCTCCTTTT TTAAACCGTT CTTCTGCAAA	2220
ATCCGTCACA GACAAGACTC GCATCTCCCC CTGTAATCCC TGCGTATTAA CGATTTCCC	2280
AACATTAAAG TAGTTCATCT TGTCTCCCTGT AATCTCCTTT TTTCCATCTT ATTCTAACAA	2340
TTCTCGAATA ATAGCCCAA TTTTTCCGA TTCTGACCCT TGAAATAAT GGTGATTCCC	2400
TCCTAAAATG AGTTTAGTAT TGGAAGTCCA ATATTCTGAT TCTCTGTACT CTTTTCTCT	2460
ATAAGGCTGA CAAAAACAA ATACAGGAAT ATGAGCTTCT ATAGATAACAT CCTCAAATC	2520
TTCCCTCAGTA ATCTCTCCAG ATATCTGAAA TTCTGGATCT TGATTTCCA ACTCTAACCC	2580
TTTTTCTTGC ATTAATTCCC AGATTTTTT ATTCTGTTCA GGACTAAATG TTGCTTGAGT	2640
TAAGTTCTTA AAATAAAGTT CAGGACCACA CTCGTCATC AGCCTCATCT GCTCTTCCAT	2700

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TTCTGGATAA GGATTTCTG AAAATCAGC AAACATGACT TTTTAGTTG TCGGTTCAAT	2760
TGCTACTAAA GTCTGACGCT TAATTGGTTT CTCGAGTAAT TTGCAAGCTA AAATTCCACT	2820
CCAACTATGT GCACAAAGTA TATATTCAAGA AATTCTTAAT TCTTCAAGTA CTTCATAAAC	2880
CGCATCTGCA AGATTATCTA GATTTTTCC AGCTTGGTCA TGAATCGAC TCCTACCTGT	2940
GTTCGGAAAA TCAATTGTCA AATAACCAAT TGTAGGAGGA GGTTTTCAA GTATAAGTGA	3000
AAAATTTCA TAACTTGGTA GCAAACCTGC TCCGTTAAA CAAACTAGCA CTTTCTTTG	3060
CTTTTGATAA GTAACAGAGA GGCTACCAAT TTCTGTAGAT ACTTCAAACC TCTTCATAAA	3120
GAAATCCACT GATTCTATAT AATGAATTAT TAAAATCCT TATCCTTTAT TTTATCACGT	3180
TCCAAGGATT TTCTCAAGTT GGAGGAAGGG GACAATATCT CTACTTCCC TTCAATAATC	3240
CTTCCAAATT ATGTTTATGT TGGTAATTAA TGGCTGCGGT TTTGCTTTTC TCAAAGACAG	3300
TCTTGGTAAG GTCAATATGA TTAATAGCTA CGATTGCGAC GGTGTAGTAA ATGATATCAG	3360
CCAGTTCTCT GGCAAGTTCC TCGTTCGAAT CCTATCCCTT CTTTTCGACC AGAGGCCCTA	3420
TTCAAAACCT CGACTACTTC TCCGACTTCC TCCACTAACT TCATAAAGAG ACCTTCATCA	3480
GTCCGAGACT GCTGTTAATG TTGATTAAG TAGTCTTGGA ATTGCCTAAA CGTTCAATCT	3540
TTTATAGTAT ATTGAAACTA GAATAGTACA CCTTTACTTC TAAAACATTG TTAGAAATCG	3600
ATTTGACTGT CCTGATCGAT TTGTCCTGTT CTTGTTTCAT TTTACTATAT CTTCTATTCC	3660
ACACAAAAAA GCGAGACATC CGTCCC GCCC TTCTTATTTT TCGTCAATAA CGATTCTTAC	3720
TTTTTTGTAT TCAGTTGGGA CAGAGTAGAC AATCGTTCTT ATCGCAGAAA TAGTGCAGACC	3780
CTTACGACCG ATTACACGAC CCACATCGCT TTGATCAAGA TTCAATGAT ATTCAAAAAA	3840
TTCTGGTGTAA TCCTCAATCT TGATAGTTAA GGCATCTGGT TGTGAAATTAA AGGGTTTCAC	3900
AATCGCAATA ATGAGATTTT CAATCGTATC CATCTGTCAA CCTACTTTAA ACTTATTTG	3960
AAAATTAGA ATCGTGAAT TTTTCAATA CGCCTTCTTT TGAAAGGATG TTACGTACTG	4020
TGTCTGAAGG TTGAGCTCCA TTAGCCAACC ATGCAAGAAC GCGGTCTTCT TTCAAAGTTA	4080
CTTGGTTTTC AGCAACAAGT GGGTTGTAAG TTCAACTGTT TTGATGAAA CGTCCGTAC	4140
GTGGTGAACG TGAATCTGCT ACGTTGATAC GGTAGAAAGG TTTTTCTTA GAACCCATAC	4200
GAGTCAAACG GATTTTAACG GCCATTTTA AAGTCTCATT TCTTTAATTT TTTATTCGG	4260
TGAAATAGCT GAGCTATTTA GCACATGTTCA TATTATAGCA GATTCTGGC ATGTGTC	4317

(2) INFORMATION FOR SEQ ID NO: 125:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 4881 base pairs

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(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 125:

AATTTATTTG ACTGGAAATT GTAGAGGGTT CTCGAAATTT CTTGAATGGT TAAAATAAGG	60
ACAAGAGAAA ACATGGATAT CTATATCCTT GTGCCAAAAA AACCACTGCC CTCCCCAGAC	120
CAACCTGAGG AAAGCAGTGA TTCTTATTTT AGGAGTTAGG AATGAATACA CGAAATCAAT	180
TTAGCTGATT ATTTTTGTT TTTCAAGAAT TCATCGTATT GTTTTGCAT TTCGTTCAAT	240
ACTTTTCGTT AGGCACCTTC AGATTTCAAT TTTTCCATCA ATTCTGGAAT CGCTTTATCT	300
GGGTCTACAG TACCACTGTT GATAGCTGTA TCAAATTGTT GCATTGTGTT AGCAATAGCT	360
GAGATTCAG ATTTCACATT GTCAGTATTG AAGATAAAC CAAGCGCTGG AGATTCTTA	420
GCTTCTGCCA ATTCTTCCTT AGAATTTCG ATTGTTGGT CTGTAACGTT TTCGTTGATG	480
TAAAGGATCC AGTTGTTTACCC AGTGTTCAT CCACCCATGT GAGTGTTCCTT TTTGTAGCCA	540
TCAAGAACGC GAACACGGTT TTCTTACCT TCAATTTTT CCCAGTTCTT GCCTTCTGGA	600
CCGTAAACAA GACCGTCAA GAGTTCTGGG TTCTGATTCA AGAGGTTCAA GATTTCCATT	660
GATTTTCCTT TGTCTTCTAGA GTTGTGAG ATGACAAAGT TAGCAACTTG TGTTGTTGG	720
TTTTTCTTGA TGAAGTTAGT AATTGGTTG ATTGTTGGATAT CTTTGTGCG AACACGTGAA	780
AGCAAGCTGT TACCGTAGTC AGCTGGTCCT ACTGTTCTT CACGAACGAA CCAAGTATCT	840
TGTTGAAGGT CAAAGGAAGT ATCGCTTGT GCGACGTCTT TTGGAATGTA GCCAGCTTCA	900
TAGAATTGTT GAAGAGTCTT CAAGTGTCTT TTGAAACGAG GCACCTCGTA ACGGTTTACA	960
ACTTTAGTAG TATGCCCTTC AAGGTCGATA ACGAATGGAA GACCGTTGTC TACTGGTAG	1020
TCAAAATTAT CAGATGGAT GAAAACCTTA CCAATAGCAA ATGGTACTAC GTCTGGAGCT	1080
TTTTCTTGA TTTGTTCAA GACTGGCTCA AGAGTTTCGT AAGAAGTAAC ACCTGAAATA	1140
TCGATACCAT ATTTAGCAAG GAGAGTTCCG TTGAAGGCAA AGTTTGAGA TGATGCAACG	1200
TTGGCTGCAA CTGGAACAGC GTAAATCTTA CCATTTACAG TATTACCTT GATGTAAGCT	1260
GGGTCAAGTG CTTGTAAAG GTCTTACCT TCTTTTTGT ACAATTCTGT CAAGTCAGCG	1320
TAAGGCACCTT TTTGAGCATT TACAATATAG TTATCTGAA AGGCAATATC ATAGTTTCA	1380
CCAGATGATG TGATAACTGA CATTCTTCA CCATAGTCAC CCCAGCCAAG GTATTGGATA	1440
TCCAATTGGG CACCAACTTT TTCTTCAATG ATTTGTTGG CATTGCTAA CAATTCAATCC	1500
AAGTTGTCTG GTTGTCAACC GATTGGTAC ATTTGATAA CAGGTTGTC ACCTGAATCA	1560

GCAGCTTTTGCTGTTACC TGTCAAATTT CCACAAGCAG CAAGACCTGC AGCCAGAGCG	1620
ACTACACTAG CAGATGCAAA AGCATATTTT TTCCAGTTT TCATGATAAA AACTCCTTT	1680
TTTATTTTTA AACTTATAAAA CAATGTAATG ATCTTATACT CAATAAAAAT CAAAGAGCAA	1740
ACTAGAAAAC TAGCCGCAGG CTGCTCAAAG CACTGCTTG AGGTTGAGA TAAGACTGAC	1800
GAAGTCAGTT ACATATATCT ACGGCAAGGC GACGTTGACG CGGTTGAAT TTGATTTCG	1860
AAGAGTATTA ACTTCACACA AGGGAAGTTG GGAAGTGGAGA AATGTTATTT CTCAATAAGC	1920
ACTATTCTTT CACACCACCG ATAGTCAAAC CTTTACAAA GTAGCGTTGG AAAATGGAT	1980
ACAAAATCGC GATTGGAAGG GTTGCACCCA CAACCATGGC CATAACGACCT GTTCTTTCG	2040
GTAGAGCAAC TCCCAGTTGA CCAATCAAGC CGACCGCTTT GGCAATGTAG TCCATATTTT	2100
GTTGGATTTG CATGAGCAA TATTGCAATG GATACAAGTT GTCACTCTTG ATGAAAGAA	2160
GGGGCGTTGAA CCAGTCATTC CAGAAACCAA GAGCTGTTAA GAGCGTGATG GTTGCATAC	2220
CTGGTAGTGA CAATGCCAAA CAGATTTGGA AGAAAATCCG GGCCTCACTG GCACCATCGA	2280
TACGAGCCGA TTCTAGAATG GCTTCTGGAA TGGTCTTCCTT GAAGAAGGAA CGCATCAAGA	2340
TGATGTTAAA TGGTGGAGAGA AGCATTGGAA CAATCAAGGC CCAAACAGTG TCACCAAGCT	2400
GAAGTACACG GGTCAACATG ATATAACCTG GTACCAAACCC AGCGTTGAAAC AACATACTGA	2460
GAAGGACGAA GATGCTAAAG AATCTGCGAT ACTTAAAGGT TGTCCTGAA ATAGCGTAGG	2520
CATAGGTTGT TGTGATAAG ACATTTGTCA ATGTCACCAAC TACGGTTACA AAGACAGAGA	2580
TGAAGAGGGC TTGTAGGATT TTATCCTTAA ACTGTGCCAA AAACTCAAAA CCGCTAAGC	2640
CAAATTGGGA TGGGAAAGAG CTATAGCCGT ATTGGAGGAG GCTTTCTCG TCTGTCACTG	2700
AAATAATGAT AACGAATACA AAAGGTAGGA TACAAGAGAG GGCAATCAAAC CCCGAAATGA	2760
TACTGAAGGAA GATATCTGCT TTCTTACTGA AGGAGTGAAT GCCGACATTA TCAATTTTT	2820
CTTTTTTAAT TTTCTTTTTT GCCATATTCT CCTCCTTCT AGAACAAAGC TGAGTTGG	2880
TCGACTCGTC TTGCAAGCAA GTTTGATAGG ATAACCAGAA TCAAACCAAC AACGGATTGG	2940
TAAAGACCGG CTGCTGCAGC CATAACGATA TCTGCTGTCT GAGTCAAACCC ATTAAAGACAA	3000
TATACGTCCA AAACGTTGGT TACATTGTAA AGCTGACCAAG CATTGTGTGG GATTTGATAG	3060
AAGAGACCGA AGTCTGCGCG GAAGATATT CCGACTGCAA GGATGGTCAA TACAGTTACA	3120
AGCGGAGTCA ACTGAGGAAT GGTTACGTT CGAATACGTT GCCACTTGCT AGCTCCGTCC	3180
ACTGTCGCTG CTTCGTAGTA GGTTGGATCA ATTCCCATGA TCGTCGCATA GTACATGACA	3240
CTGCTATATC CAAAGCCTTT CCAAATACCT AGGAAAAGTA GGAGATAGGG CCAGATGCC	3300

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AGGTCAGCGT	AGAAATTGAC	TTCTTGAGA	CCAAGACTTT	CCAATAGATG	ATTGAACACC	3360
CCTTTATCAA	TATTTAGGAA	GGCATCTGTA	AAGAAAATG	TGATAACCCA	AGACAAGAAG	3420
TAAGGGAACA	ACATAGAAGT	TTGAAAATC	TTCACCATT	TCTTAGAACG	GAGCTCGCTG	3480
AGGATAATGG	CAATCCCTAC	AGATAACA	AAACCTAGAA	AGATAAAGCC	AAGATTGTAG	3540
AGGACAGTAT	TTCGTGTGAT	AATAAAGGCG	TCTCTGAAAC	TAAATAAGAA	TCTAAAATTA	3600
TCGAGTCCGA	CCCATTACT	ATTATGATA	CTATCTATGA	AACCATTACT	GGTCATGTGG	3660
TAGTCTTGA	AGGCAACCAC	GTTCCCAAAT	ACTGGAATGT	AAAAGAATAG	AATCAACCAG	3720
AGTGCCCCCTG	GCAAAACCAT	CAAGAGAAAG	ATCCAGTTGT	CTCTCAATGT	TTTGAAAAC	3780
TTTTTCATAA	TTTCCTCCCT	TTTTATTTG	ATATCCATCT	AAAATTCCTT	TTTAGACTT	3840
TTGATAACGA	TTACATTATT	AGTATACTCC	TATTTGCAGG	TTAGGTTAAA	CTCCTAATTA	3900
TAGAAAAAAC	TCCACAAATT	ATGTAGCAGA	TTTAAAAC	TATCACCAC	ATCAAACAAA	3960
TGTCCTAAAT	CAATTGTTA	TTTTATCTCT	ATTAGCCCAG	TGATGGCGTC	ACTCTGTTAT	4020
AAGCATCCAA	CAACGGGGTA	TACTGAAAAA	TCTCCAGACT	AGGGAACACTCA	GCGATAGTTC	4080
CTAATCTGGA	GATTTTAAT	ATGTTATTAG	GGCTTGCTT	TCAACTTAGC	AATAACCTCT	4140
TTAAGATTAT	CAATCAACTC	TGCTGCAGTA	TGCTCAGAGC	CTTTTCATC	TGCCAAGAAC	4200
AAAACTGCTT	TTTGAAGTTC	TTTTGAGAG	TTTCAGGAA	CATCCTATC	TACTGTTCA	4260
AGGTTTGAGT	CTTTAAGAAG	TTTACTTAAT	TCCTTGCTA	ATTCTTGAG	TTTGATTTGC	4320
AGACTCATCT	TCTCCTGCTG	TTTCTTGCC	CGCTGTTGT	CCTCCATCCT	TAGTTGCTGA	4380
CTGGCTTCTC	TTAATGGACT	CTAGGGAAGC	AATGGCATCT	TTGACTGTTT	GCAAGATATC	4440
ACGTAAACCT	TGCTCTGTCA	AACTATCATC	TGCAAAAGCT	TTATTAGCCT	CTGCCAAAAC	4500
CAGACGTGCT	GAATCTGTGG	TAGGATTCGA	TACACCTGTC	AATGATCTCA	AAAGATTTTC	4560
TAAGGTTGAG	GTCTGCTTAC	TAATACTAGA	CTAAATCAA	AAAGTATTAT	ATAACAGTGA	4620
TATGAAATCA	ACTAAAGAAG	AAATCCAAAC	CATCAAAACA	CTTTAAAAG	ACTCTCGTAC	4680
AGCTAAATAT	CATAAACGCC	TTCAAATCGT	TCTATTTGT	CTGATGGCA	AATCTTATAA	4740
AGAGATTATA	GAACTTTAT	AGTAGTTGA	AATAAGATGT	GAACATCTCT	ATCAGGAAAG	4800
TCAAATTAAT	TTATAGAAAT	ATTTCAGCAG	CCAAGGTGTA	CTGTTATAGA	TTCAATACAC	4860
TATACTTGGT	GGTTTAGCTC	G				4881

(2) INFORMATION FOR SEQ ID NO: 126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13121 base pairs
- (B) TYPE: nucleic acid

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(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 126:

AGGATCCCCG	GAAAAGGAGA	CTAAAAATGA	AGAAAAAAATT	TCTAGCATT	TTGCTAATT	60
TATTCCCAAT	TTTCTCATTA	GGTATTGCCA	AAGCAGAAC	GATTAAGATT	GTTTCTGATA	120
CCGCCTATGC	ACCTTTGAG	TTTAAAGATT	CAGATCAAAC	TTATAAAGGA	ATTGATGTTG	180
ACATTATTAA	CAAAGTCGCT	GAGATTAAG	GCTGGAACAT	TCAGATGTCC	TATCCTGGAT	240
TTGACGCAGC	AGTCAATGCG	GTTCAAGCTG	GGCAAGCCGA	CGCTATCATG	GCAGGGATGA	300
CAAAGACTAA	AGAACGTGAA	AAAGTCTTC	CCATGTCTGA	TACTTACTAT	GATACAAAAG	360
TTGTCATTGC	TACTACAAAG	TCACACAAAA	TTAGCAAGTA	CGACCAATTA	ACTGGCAAAA	420
CCGTTGGTGT	AAAAAACGGA	ACTGCCGCTC	AACGTTTCC	TGAAACAATC	AAAGATAAAT	480
ACGGCTTATC	TATTAAAACA	TTTGACACTG	GTGATTTAAT	GAACACAGC	TTGAGTGCTG	540
GTGCCATCGA	TGCCATGATG	GATGACAAC	CTGTTATCGA	ATATGCCATT	AACCAAGGTC	600
AAGACCTCCA	TATTGAAATG	GATGGTGAAG	CTGTAGGAAG	TTTGCTTTC	GGTGTGAAAA	660
AAGGAAGTAA	ATACGAGCAC	CTGGTTACTG	AATTTAACCA	AGCCTTGTCT	GAAATGAAAA	720
AAGATGGTAG	TCTTGATAAA	ATTATCAAGA	AATGGACTGC	TTCATCATCT	TCAGCAGTGC	780
CAACTACAAAC	TACTCTCGCA	GGATTAAAAG	CTATTCCGT	TAAGGCTAAA	TATATCATTG	840
CCAGCGATTC	TTCTTTGCC	CCTTTGTTT	TCCAAAATTC	AAGCAACCAA	TACACTGGTA	900
TTGATATGGA	ATTGATTAAG	GCAATCGCTA	AAGACCAAGG	TTTGAAATT	GAAATCACCA	960
ACCCCTGGTT	TGATGCTGCT	ATCAGTGCTG	TCCAAGCTGG	TCAAGCCGAT	GGTATCATCG	1020
CTGGTATGTC	TGTCACAGAT	GCTCGTAAGG	CAACTTTGA	CTTCTCAGAA	TCATACTACA	1080
CTGCTAACAC	CATTCTGGT	GTCAAAGAAT	CAAGCAATAT	TGCTTCTTAT	GAAGATCTAA	1140
AAGGAAAGAC	AGTCGGTGT	AAAAACGGAA	CTGCTTCTCA	AACCTTCCTA	ACAGAAAATC	1200
AAAGCAAATA	CGGCTACAAA	ATCAAAACCT	TTGCTGATGG	TTCTCAATG	TATGACAGTT	1260
TAAACACTGG	TGCCATTGAT	GCCGTTATGG	ATGATGAACC	TGTTCTCAA	TATTCTATCA	1320
GCCAAGGTCA	AAAATTGAAA	ACTCCAATCT	CTGGAACCTCC	AATCGGTGAA	ACAGCCTTTG	1380
CCGTTAAAAA	AGGAGCAAAT	CCAGAACTGA	TTGAAATGTT	CAACAAACGGA	CTTGCAAACC	1440
TTAAAGCAA	CGGTGAATT	CAAAAGATT	TTGACAAATA	CCTAGCTAGC	GAATCTCAA	1500
CTGCTTCAAC	AAGTACTGTT	GACGAAACAA	CGCTCTGGGG	CTTGCTTCAA	AACAACTACA	1560

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AACAACTCCT	TAGCGGTCTT	GGPATCACTC	TTGCTCTAGC	TCTTATCTCA	TTTGCTATTG	1620
CCATTGTCAT	CGGAATTATC	TTCGGTATGT	TTAGCGTTAG	CCCATACAAA	TCTCTTCGCG	1680
TCATCTCTGA	GATTTCGTT	GACGTTATTC	GTGGTATTCC	ATTGATGATT	CTTGAGCCT	1740
TCATCTCTG	GGGAATTCCA	AACTTCATCG	AGTCTATCAC	AGGCCAACAA	AGCCAATTA	1800
ACGACTTTGT	AGCTGGAACC	ATTGCCCTCT	CACTCAATGC	GGCTGCTTAT	ATCGCTGAAA	1860
TCGTTCGTGG	TGGTATTTCAG	GCCGTTCCAG	TTGGCCAAT	GGAAGCCAGC	CGAAGCTTGG	1920
GTATCTCTTA	TGGAAAAACC	ATGCGTAAGA	TTATCTTGCC	ACAAGCAACT	AAATTGATGT	1980
TGCCAAACTT	TGTCAACCAA	TTCGTTATCG	CTCTTAAAGA	TACAACATAC	GTATCTGCTA	2040
TCGGTTGGT	TGAACTCTTC	CAAACGGTA	AGATTATCAT	TGCTCGTAAC	TACCAAAGTT	2100
TCAAGATGTA	TGCAATCCTT	GCTATCTTCT	ATCTTGTAAAT	TATCACACTT	TTGACTAGAC	2160
TAGCGAACAG	CTTAGAAAAG	AGGATTCGTT	AATGGCAAAA	TTAAAATTG	ATGTAAATGA	2220
TTTACACAAG	CACTATGGAA	AAAATGAAGT	CCTAAAAGGA	ATTACGACTA	AGTTCTATGA	2280
AGGAGATGTT	GTGGTATCA	TCGGTCCTTC	AGGTTCTGGT	AAGTCAACTT	TCCTCCGTAG	2340
CCTCAATCTT	TTAGAAGAAG	TCACTAGCGG	TCACATCACT	GTGAACGGCT	ATGATTTAAC	2400
TGAAAAAAACA	ACCAATGTTG	ACCACGTCCG	TGAAAATATC	GGCATGGTAT	TCCAACACTT	2460
CAACCTCTTC	CCTCATATGT	CTGTATTGGA	CAACATCACC	TTGCTCCTA	TTGAGCACAA	2520
GTTGATGACT	AAGGAAGAAG	CTGAGGAATT	GGGAATGGAG	TTGCTTGAAA	AGGTTGGACT	2580
AGCAGATAAA	GCTAATGCCA	ATCCAGATAG	CCTATCAGGT	GGTCAAAAAC	AACGTGTGGC	2640
CATCGCTCGT	GGCCTAGCAA	TGAATCCAGA	CATCATGCTC	TTCGATGAAC	CAACTTCTGC	2700
CCTTGACCT	GAGATGGTG	GAGACGTACT	TAACGTTATG	AAGGAATTGG	CTGAGCAAGG	2760
CATGACCATG	ATTATCGTAA	CCCATGAGAT	GGGATTTGCT	CGTCAGGTTG	CCAACCGCGT	2820
TATCTTTACT	GCAGATGGCG	AGTCCTTGA	AGACGGAACA	CCTGACCAA	TCTTGATAA	2880
CCCACAAACAC	CCTCGTCTGA	AAGAGTTCTT	AGATAAGGTC	TTAAACGTCT	AAACTCAAAC	2940
TGTAAGGATT	TCCTTGCAGT	TTTTCTACCT	CGTATTGGAA	TTTTTGATTT	TTCGAAAAT	3000
TATGTTAGAA	TTAAGTTAT	GAAATGAGGT	TTCCTCATAC	CTAGCAAGAC	TAGGAATAAA	3060
AATAGAAATT	AGGTAGCTAG	ATGTCATCTA	AGGTTATTGT	TACAATTTC	GGTGCAGTG	3120
GAGACCTGGC	TAAACGCAAG	CTCTACCCTT	CCCTTTTTAG	ACTATATCAA	TCCGGCAATC	3180
TTTCCAAGCA	CTTTGCCGTT	ATTGGAACTG	CCCGTAGACC	TTGGAGTAAG	GAATATTG	3240
AATCTGTAGT	TGTCGAGTCC	ATCCTTGATT	TGGCAGATAG	TACCGAGCAA	GCCCAAGAAT	3300
TTGCTAGCCA	CTTCTACTAT	CAAAGCCATG	ATGTCATGA	TTCGGAACAT	TATATTGCTT	3360

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TGCGTCAATT ACAAGCTGAG CTTAATGAAA AATACCAAGC TGAACACAAT AAGCTCTTCT	3420
TCTTGTCTAT GGCACCTCAG TTCTTTGGAA CCATTGCCAA ACACCTCAAA TCTGAAAACA	3480
TTGTCGATGG CAAAGGTTTT GAGCGCTTGA TCCTGAAAA ACCATTGGT ACAGATTACG	3540
CAACTGCAAG CAAGTTGAAT GACGAACCTCC TAGAACACATT TGACGAAGAA CAAATTTCC	3600
GTATCGACCA TTATCTTGGT AAGGAAATGA TCCAAAGCAT CTTTGCAGTT CGCTTGCAA	3660
ACTTGATTT TGAAAACGTT TGGAAACAAGG ATTTTATCGA CAATGTTCAA ATTACCTTTG	3720
CGGAGCGCTT GGGTGTAGAA GAACGTGGTG GCTACTATGA CCAATCCGGT GCCCTCCGTG	3780
ACATGGTCCA AAACCACACT CTACAACTTC TTTCGCTCCT CGCCATGGAC AAACCAGCAA	3840
GCTTCACAAA AGACGAGATT CGTGCTGAAA AGATTAAGGT CTTTAAAAAC CTCTATCATC	3900
CAACTGATGA AGAACTCAAA GAACACTTTA TCCGTGGCA ATACCGCTCT GGTAAGATTG	3960
ATGGCATGAA ATACATCTCT TATCGTAGCG AGCCAAATGT GAATCCAGAA TCAACAACTG	4020
AAACCTTTAC ATCTGGTGCC TTCTTTGTAG ACAGCGATCG ATTCCGTGGT GTTCCTTTCT	4080
TTTTCGTCAG AGGTAAACGA CTGACTGAAA AAGGAACCTCA TGTCAACATC GTCTTAAAC	4140
AAATGGATTTC TATCTTGGA GAACCACTTG CTCCAAATAT TTTGACCATC TATATTCAAC	4200
CAACAGAAGG CTTCTCTCTT AGCCTAAATG GGAAGCAAGT AGGAGAAGAA TTTAACTTGG	4260
CTCCTAACTC ACTTGATTAC CGTACAGATG CGACTGCAAC TGGTGCTTCT CCAGAACCAT	4320
ACGAAAAATT GATTTATGAT GTCTAAATA ACAACTCAAC TAACTTTAGC CACTGGATG	4380
AAGTTTGTGC GTCATGGAAG TTGATTGACC GTATTGAAAA GCTCTGGCT GAAAATGGTG	4440
CCCCACTTCA TGACTATAAA GCTGGAAGCA TGGGACCTCA AGCCAGCTTT GACCTACTTG	4500
AAAAATTCCGG TGCCAAATGG ACTTGGCAAC CAGATATCAC CTATCGCAA GATGGTCGCT	4560
TAGAATAAAA AAATTCCTG CAAGTTTATG CcTTGCAGGA TTTTTGCTTC TGATTAGATT	4620
AAACCTTCCA AGAGACCTTT CATAAAAGTTT TCTGAGTTAA ACTCTCCAAT ATCATCGATT	4680
TTTTCACCAA AACCAATCAA TTTTACAGGA ATATTGAGTT CTTCACGAAT GGCTAGAAC	4740
ACACCTCCTC GAGCAGTTCC ATCAATCTTA GTCAAAACAA TTCCCGTTAA AGGTGTGATT	4800
TTCGAAAATT CTTTGGCCTG TACTAGGGCA TTTTGACCTG TTGATGCATC AAGTGCCAAG	4860
AAGGTTTCAT GTGGTGTCTC TGGCACAAAC CGTTTGATAA TACGACCAAT CTTTTCCAAC	4920
TCAGCCATAA GGTTATCCTT ATTTGCGAGA CGACCAGCAG TATCAATCAT GAGAATATCG	4980
ATACCTTCAG TCACGGCACG TTCCATACCA TCAAAGACCA CGCTGGCTGG ATCAGCTTT	5040
TCAGGGCCAG TTACTACTGG AACATCTACT CGTCGGCCCC ATTCAAGCTAG CTGAGCTACT	5100

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GCACCCGCAC	GGAAGGTATC	TGCTGCAACC	AGCATGACCT	TCTTACCAGC	TTGTTTGTAG	5160
CGGTGGGCTA	GTTTCCGAT	AGAAGTTGTT	TTCCCAACAC	CATTCACACC	AACAAAGAGC	5220
ATAACTGTCA	AGTTATCTTG	GAAGTGGATG	CTTTCATCGT	AGCTACCATC	CTTTTCATAA	5280
AGCTCAACCA	ATTCTCAAT	GATGACACGA	CGAAGTACAT	CAGGTTCTT	GGCATTTC	5340
AGCTTGGCTT	CGTAACGTAG	TTCCTCCGTT	AAGTTAGAAG	CGACTTGGAC	ACCAACATCA	5400
CTCATAATCA	GCAGTTCTTC	CAGTCCTCG	AAAAATTCTT	CGTCAACAGA	GCGGAAGTTA	5460
GCAAAGAAGG	CATTCAAGCG	GGCACCGAAA	CCTGTGCGAG	TTTTCTTAAG	ACTGCGGTCA	5520
TATTTTCCT	GAACAGTTTC	TTCTGTTGA	GGAGCTTCTG	GTTCAAGCAC	TTCAGAATTA	5580
TTTTCTTCTA	CAGTCCTTC	GTGCTCAAGC	TTCTCTTC	CTGGTAATTC	TTCTGAGTTT	5640
GGTAATTCTT	CTATTTCTTC	TTGAGAAACC	CCTACAGCTG	GCTCTGAATC	CTGACTTTCT	5700
TCAACTGTGT	CTTGGATTTC	CTCTCTTGG	AACACAGTT	GTTCAACAAT	TTCAACCTCT	5760
GCTTCTTC	GAGAAACTTC	CTCAACTTCT	GTGAAGGTAG	GATCAACATC	TTCAGACAAA	5820
TCAAGATTTT	CCAGAGCTTC	TTTTACAACT	TCTTCGATTT	TAGGTTCTTC	TTTTTTCCG	5880
AATAGACGGT	CAAACAATCC	CATATCTTAG	TTCTCTTTA	GCACATATTC	TTCGATAGCC	5940
CAGGCGACAG	CTTCCTCATC	GTTGGTCATC	GGCGTCACTA	CATTTGGGC	TGCCTTTACT	6000
TCAGGAACAG	CGTTTGCA	AGCAACACCA	AGACCTGCC	ATTCAATCAT	AGAGAGGTCA	6060
TTGGCCTCGT	CACCACAAGC	CATCACTTGA	CTTTGGTCGA	TTCCAAGATG	GCTGATTAGT	6120
TTTGCCAAAC	CTGTTGCTTT	ATGAACATTC	TTTGGTGACC	ATTCTAGCAA	CATTCACGT	6180
GATTTAAAGA	TTTCATATTG	GTCAAACAAT	TCTGGAGAAA	TCTTCTGAAT	GGCTGCATCC	6240
AAGGGTTCTT	GAGCAAAGGC	AGTCACGCAT	TTGTTGAGG	TCATTTGACT	AGATAAGTCT	6300
TCAAAGTCCA	CTGGAACAAA	GGTCAAAGCT	GGATTGAATT	TGGCATAAAG	ACTTTCTTGG	6360
TCCGATTGGA	TTTGATAAAC	TGTTCTTCT	GAGATGGCAT	CAAGAGGCAG	TGATAATTTC	6420
TCTGTTTCTT	CATACAAACG	TGCCACATCA	TCATATGAAA	AGACTGTTTT	ATCAAGGATT	6480
TCTCCTGTAT	TTTTCTGAAC	TAATCCACCA	TTAAAAGTAA	TGGTATACTC	ATCTTCTG	6540
CCGTCAGTCC	CTAACTCATG	GAGAAAGAAA	TCCATGGCTT	TTAAGGGACG	ACCAGTTGTC	6600
AATACGACCT	TGATACCACG	ATCACGCGCA	gCTTGCAAGG	TTTCCTTGGT	ACGATCCGTC	6660
AGCCTTTAT	CAGTAGTCAG	CAAGGTCCCG	TCCAAGTCCA	ATGCAATCAA	TTTTATATCT	6720
GCCATTATAA	GCCCTCCATA	TAAGCTATAA	CCGACCGTTC	CTTATGGTGA	CCAATCACAG	6780
TCTTTGCTAA	TTCTAAAATT	TCAGGTCGTG	CATTTTCAGG	AGCTACAGGA	TGTCCACAA	6840
CCTGCATCAT	ATGTAAGTCA	TTAAGATTGT	CTCCAAAAGC	CATGACCTGA	TCCATTGTGA	6900

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TACCAAGTTT	TTTAACATAAT	TCAACAATGG	CCACTCCCTT	ATCGACATAG	TCCAGAACAA	6960
TATCAATGGA	TTCAAAGCCA	GTTGTCATGG	CCTTAACACC	AGGAACGTTT	TCGTTACCC	7020
AAGCCTCCCC	ATCTTCCAGC	GTTTCTTCTG	TGAAGTTGGT	TGTAAATTG	AAAATGTCAT	7080
CTGTGATATC	TTCCAAACTC	GCTACTTTT	GGATATTTTC	ATTATAGTGC	TGACTCACTT	7140
TCAAATAGGT	CTCATCAACC	GTATCTAGAA	CATATGAACC	CTTCTTACCC	GTCAAGAGCA	7200
GTTTTATTGAT	ATCTACATAA	GGTGAAGTTT	TCAGCTTTC	AAAAGTGCC	AGATAAAAGT	7260
CACGAGACAT	AGTCGCTTCA	TACAAGTCCT	GACCTTGATA	CTCTACCAAA	CTGCCATTTC	7320
CCCGCATGAA	AATAATGTCA	TCACGAACAC	CAGCAAATAA	TTTTCTAGA	GACAGAAATC	7380
CCCGACCCGA	AGCTACCGCA	AAGTAAATCC	CTTTTTCTT	GTAAGGAAACC	AAGAGAGACT	7440
TGAGACGATC	CATATCAAAG	CGTCCATTCC	CATCTAGGAA	GGTTCCGTCC	ATATCCGTTG	7500
CTACTAGTTT	AATTGTCATC	CTTCAATACT	TTCTAAATCT	TTTAACTTAA	CTGAAACAAT	7560
CTTTGAAACA	CCCGATTCTT	GCATGGTCAC	TCCATAGATG	GAATCAGCCG	CTGCCATGGT	7620
TCCCTTACGG	TGGGTTACGA	CGATGAACTG	GCTGTCCTT	TCAAAGCGGT	TGAGGTAATC	7680
CCCAAAACGT	TTAACATTGG	CTTCATCCAG	CGCAGCTTCC	ACCTCATCCA	AGATAACAAA	7740
TGGAATAGTC	TTGACACGAA	TAATGGAGAA	GAGCAAGGCA	AGAGCCGATA	GGGTTTTTC	7800
ACCACCACTC	ATGAGATTAA	GAGACTGGAT	TTTCTTGCC	GGTGGTTGGA	CAGAAATTTC	7860
AACCCCAGCT	GTCAGCAAGT	CTCCTTCAGT	CAAATGAGG	TCAGCCTGAC	CTCCACCAAA	7920
CATCTGCTTG	AAGGTCACTT	TAAAGGACTC	ACGAATGACC	TCAAAGTTG	ATTTAAAGCG	7980
TTCCTTGACC	TCATCATTCA	TCTCTGTAAT	GGTCTCAAGG	AGCAGGTTT	TCGCAGACAA	8040
AATATCATCA	CGTTGGCTAT	TTAGGAAATC	CAGACGGTTG	TGAACTCTT	CGTACTGTT	8100
AATAGCGTCT	AAATTGACAG	GACCAGTGA	GCGTATAGCC	TTCTCTAAAT	CCTTAACCTC	8160
TTGCTCTGCC	AGATTGAGAT	TTTCCAACTC	ATGCGCCTT	TCTAAAGCTT	CTGTGTAGCT	8220
GATCTGGTAC	TGGTCTGTTA	ATTGACTTTG	AGATGGCGC	AAGCGCTCGC	TAACCTTTTC	8280
TTTCTTGGCT	TCAGCACGAG	TTTGCCTGCG	AATCCACTCT	TCATTCTGCT	GGCGAGCCTG	8340
ATCCAAATGA	CTAGCAATAT	CATCCAGTTG	ACCCTCAATA	TCATCCAAC	CAAAC TGCTT	8400
GCGAATCAAA	CCTTGTGGA	GATTGTTTT	TTGAGTTTTG	GATTCTCCG	CCTGTTGACT	8460
GAGCAATTCT	GTATCAACCT	TCTCAAGATT	ATCAATCTT	TCTTGAAGAA	GGCGCTGGAT	8520
TTCCTCTTGT	TCAAAATCAA	GATTGTCCAA	TTCCCTGCC	AAGCGTTCAA	TATCAGCAAC	8580
TTCATAACGT	TTTGCCCTT	GCAGTTCTGT	CTTAAGCAAA	CGAGCTTGCG	CTAGCTCTTC	8640

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CTGCAAGTT TGATAGCGTT CTTGGATGGC ATTTTTGTTA GACTTAATCT CTTCAATCTC	8700
AGCTTCCAGA TTTTGCTTGT CACTGGAGAT TGCAGCAAGA CGCTCTTGGC AGTTTCCTT	8760
ATCCGCTTGC CAATCTCCCT CGGAAAGACG ATCTATTTCC TCTTCTTGGA GTTTCCAAAG	8820
AGTTCCAGT TCTTCAACTT GCTGACTAGT TTGCTGATAA GCGAGGAACA AGCCTTGCTC	8880
CTGAATACGT GCCTGCTCTC CTTGAGATTT AATAGCTTCT AATGACTCGG TCAATCTGGC	8940
CATCTCATCT TGCAAGGTCT TCAAAGTCGC CTCTTCTGAA CCCAAGCTTG CTTCTCTTC	9000
AGCAATTCTTCT TTTTGTAAATT GCTCCAGTTC TGGCTTGATA AAAATGCTGT TATTCTGGCG	9060
ATTGGCACCA CCTGCATAAG AACCACCTGT GCGCAACTCT GTCCCATCCA ATGTCACCAT	9120
ACGAACCTGA TAACGAACCTT GGCGAGCTGC TGCACGCGCA TGTTCTACGG TATCAAAGAT	9180
AGCCGTCGTA GCTAGCAAGT TCTTGAAAT GGCTTCCAGT CTAGTATCAA AAGTCACCAA	9240
CTCATCTGCC ATCCCAAGGA AACCTGGGCT TACAGCGATA GCATCTTGGT TCTGACTAGA	9300
AATCGTACGC GCCTTGATAG TGGTCAAAGG AAGAAAGGTT GCACGACCGG CTCTGTTCCG	9360
TTAAGGAAG TCAATAGCCT TGGTTGCCGA CTCTTCATCT TCTACGATGA TATGCTGGCT	9420
ACTTGCCCCCT AAGGCAATCT CTAGGGCACT TTGATAATAA ACATCAAAGG TCAGATGCTC	9480
ACTGACTGCA CCAATAATCC CACCTAGCG ATCTTTTCT TGGAGAACAC TCTTAACACC	9540
TGCATAAAAG TTACTATGAT TTCTCAGGAT ATTTTCCAAA CTTTGAGCTC TGGCCTGCTT	9600
GTTTTTGAGA TTATCCAGAC GGTCAAAGAG TTGGCTTGT TGAGCTTGAT AGGAAGTTTT	9660
CTGCTCCTCT TGCTCCTTGG CAATAGCTTG GTAGTCAGCC AATAATTCT GAACCTGCTC	9720
CTTGGCAGTT TCAAGCTCTT CCTTTGCTG ACTAGCCTTC TCTTCTAGCTA TAGCTAATTG	9780
CTCTTTCAGC TTTCTAGTT GATCTGCTTG TTTTGAGAA AGCTGACGAC TATTTCCAA	9840
CTCATTCTCA ATACGGGTCA ACTGGTTGA GACATCCGCT TCTTCTTGTAAAGAGCTAC	9900
AAAGCGTTCA CGTAAGAGCT CAATCATCTG ATCAGGATCG TCTGAGAAAG CCAGCAATT	9960
AGCTTCTAAA CGATTGAGTT TTTGATTATT TTGGACTAGA TTTCCCTCTA ACAGAGCTAA	10020
AGAGCTTCT TTATCAGACT TTTCTTTGCT GAGTGAATTCTCTTATCCT CCAAAGCAGC	10080
CAAACGGGCT TGTGCCTCCT GTTGATTCAA GGCCACTTGC TCGGACTCCA GTTTCGATAG	10140
GGCTAATTCTT CTTTCTAAAT CACTAATCAG ACTAGTCAAG TCCATCAAAC TGCCTTGGTC	10200
TTTGGCCATT TCAGCCTGTA AATCTTGGCG TTGCTTTTA AGAGTTTGAT TTTCTCTTC	10260
TAATTTTCA CGCTTTGGT AATAACTCAT CAAGAGTTCT TGAACCTGAG TCAACTCTTC	10320
TTCTGTGAC TCTAGTTCAAG CTTATTTTC CTTGATTTGA GCAACCAGAA CATCTAAATA	10380
AATAGCCTTA CGTTGTCCTT CCAAGTCTAA AAACCTACGG GCATTCTCAG CTTGCTTCTC	10440

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AAGAGGCTTG ATTTGATTAT CCAACTCGTA GATAATGTCC TCTAACCGGT CCAGATTATC	10500
CTGAGTTTGC TGCAGTTTAC TCTCGGTTTC TTTTCTGCGA GTCTTGTATT TTAAAACCTCC	10560
AGCAGCTTCT TCAAAAATAG CTCGTCGTTC CTCAGGCTTG GAATTAAAAA TCTCCTCAAC	10620
CTTCCCTTGG GAAATAATAG AGAAGGAATC TCGTCCCAAT CCAGTATCCA AGAAGAGGTC	10680
ATGAATATCA CGCAGACGGA CTTTCTTGCC GTCAATCTTG TATTCGCTAT CTCCACTACG	10740
ATAGACATGG CGTTCCACCC TGATTCTTG ACCTGCATCC TTGATAAAATC CGTCATGATT	10800
ATCCAGAGTC ACAACTACAG AAGCATAATT GAGCGGTTTG CGACTTTCGG TTCCAGCAAA	10860
GATGATATCC GGCATCTTGC CCCCACGGAG ACTCTTGACA CTAGACTCCC CCAAAGCCCA	10920
ACGCAGACTT TCTGTAATAT TGGACTTTCC AGATCCATTG GGTCCAACAA CTGCCGTAC	10980
ACCTTGGTCA AAAACGACCT TGGTCTTATC AGCAAAAGAC TTGAACCCCT GAATTCGAT	11040
TTCTTTAAA TACATGAATC CAGCCCTTC TCAACGGCAT TTTTGGCAGC TTCTGCTCT	11100
GCTAATTTCT TAGAACGACC TTGGCCTTGA CGCATGCTCT TACCTTCAAC AAGAACTTCT	11160
ACATCAAAAA CCTTATCGTG AGCAGGCCCT GTTTCAGAAA TCACCTGATA ACGAATAGCC	11220
ACATCACCAC TGACCTGAAG CAACTCTTGG AGATGGGTTT TATAGTCTGT AATCATCTCA	11280
AACTCGCCTG CTTCAACCTT AGGAATCATG ACTTGATAGA TAAATCCCTT GACCTTGGCC	11340
ACATCCTTAT CCAAAAGAAG GGCACCAAGA AAGGCTTCAA AGGCATCACC AAGAATGGTG	11400
TCACGATTGC GACCACCTGA TTTTCTTCC CCTTTACCCA ACTTGATAAA CTGGTCAAAC	11460
TGGCAATCAC GCGCAAAACC AGCTAAACTC TCCTCACGGA CAATCATAGC ACGGAGTTT	11520
GATAGGTAC CTTCAGGCTT TTTAGGATAT TTTTTATATA GATATTCTGA AATCAATAAC	11580
TGTAGAACAG CGTCTCCTAA AAATTCCAAG CGTTCATTGT GTGAAATTAA TAAGAGGCGG	11640
TGCTCATTGG CATAACTCGT ATGAGTAAAG GCAGTTCCA GTAACTTTT GTCTGAAAT	11700
TCGATTGCAA AATGATTCTT TAGTACAGTT TGTATTCTT TCATACCAAC CTCTTCTAA	11760
CTGATAATAG TCCTTTTAT TATATCAAAA AAAGCCCCCT GAGTCACTCT AAAACGGGAC	11820
TGGAAAGCAT TTGGGAATTC TTTAGACAGA GATTCTCAGT TTTAGCGGCA AATTGGGTC	11880
AGGATAAAGA AAAAAGCCCT ATTAAGGGCT TTTTAGGATG TTTACATCCA CCCTGAGGGA	11940
ATCGAACCCC CATCTCAAGA ACCGGAATCT TACGTGATAT CCATTACACT AAGGGTGGAA	12000
ACTTGTTTTA TTATAACAGA AATTGCTCT AATAACAAGT TTTTGGTCA AAGACCCGT	12060
CTTAGTGGGA AGCATCCCCA TTCCAGATGG AGTTTTCAC GATCACATAA TCAACGTGTT	12120
TAAGGTCAGC AACCTGACGT CCACCTGCAT AAGAAATAGC ACTTTGAAGG TCTTGTCCA	12180

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TCTCAGTTAA	AGTGTCTTGC	AGATGACCTT	TAGCAGGAAG	CAAGATACT	TTGCCTTCCA	12240
CATTTTTGTA	AGCACCTTTT	TGATATTGTG	AGGCTGAACC	ATAATATTCT	TTGAACGTGTT	12300
CACCATCGAC	TTCAATCGTT	TTCCCTGGAC	TTTCAATGTG	TCCTGCAAAG	AGGGAACCAA	12360
TCATGATCAT	GCTAGCACCG	AAGCGGATAG	ACTTAGCAAT	ATCACCGTGA	GTACGAATTG	12420
CTCCATCAGC	GATAATCGGT	TTACGCGCAG	CCTTGGCACA	CCAGCGTAGA	GCAGCCAAGT	12480
GCCAACCACC	TGTACCAAAA	CCAGTCTTAA	CCTTGGTGAT	ACAAACCTTA	CCAGGACCGA	12540
TTCCGACCTT	AGTAGCATCC	GCACCAGCAT	TTTCCAATTG	ACGCACAGCT	TCTGGTGTTC	12600
CCACATTTCC	AGCAATGACA	AAGGTATCTG	GCAATTCTTT	CTTGATGTGT	TGAATCATAG	12660
AAATCACGCT	ATCCGCATGA	CCATGAGCAA	TATCAATAGT	GATATACTCA	GGAGTATCAG	12720
CCTTGAGCTG	GCTAACAAAA	TCATACTCAT	AATCCTTAAC	ACCGACAGAG	ATAGAACGAA	12780
TGAGCCCTTG	ATTGTGCATT	CGTTAATAA	AAGGAATGCG	TCCTGCCTCA	TCAAAACGGT	12840
GCATAATGTA	GAAGTAACCA	CCTTAGCCA	GTTGCTCTGC	TACATTTCA	TCCAAAATCG	12900
TCTGCATATT	CGCTGGCACA	ACAGGTAGTT	TAAAGGTGTG	ATTTCCCTAA	GTGACACTTG	12960
TATCCGCTTC	TGCACGGCTT	TTAATGACAC	ATTATTTGG	AATCAATTGA	ATATCTTCGT	13020
AATCAAAAT	TGGAAATTCA	TTAACACATAT	CGATGTCTCG	TTTCTTTGT	AATGACCTAC	13080
CTATGCTCTT	GCATCACTAC	GCCTTTCCG	ACGTTTCCTG	G		13121

(2) INFORMATION FOR SEQ ID NO: 127:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9578 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 127:

CCGAATGCAA	TGTTTACGGT	TGAACTTGAA	AATGGACATC	AGATTTTAGC	AACAGTTCT	60
GGTAAATTC	GTAAAACATA	TATTCGTATT	TTAGCGGGAG	ATCGTGTAC	TGTCGAAATG	120
AGTCCATATG	ACTTGACACG	TGGACGTATC	ACTTACCGCT	TTAAATAATC	AAAAAACTTG	180
GAGGGATAAG	AAATGAAAGT	AAGACCATCG	GTCAAACCAA	TTTGCATA	CTGTAAAGTT	240
ATTCGTCGTA	ATGGTCGTGT	TATGTAATT	TGCCAGCAA	ATCCAAAACA	CAAACAAACGT	300
CAAGGATAAG	ATAGAAAGGA	GAAAACATGG	CTCGTATTGC	TGGAGTTGAT	ATTCCAAATG	360
ACAAACGCGT	AGTAATCTCA	TTGACTTATG	TTTATGGTAT	CGGACTTGCA	ACATCTAAGA	420
AAATTGGC	TGCTGCTGGA	ATCTCAGAAG	ATGTTCGTGT	ACGTGATCTT	ACATCAGATC	480

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AAGAAGATGC TATCCGTCGT	GAAGTGGATG	CAATCAAAGT	TGAAGGTGAC	CTTCGTCGTG	540	
AAGTAAACTT	GAACATCAA	CGTTGATGG	AAATCGGTT	ATACCGTGGT	ATCCGTCACC	600
GTCGTGGACT	TCCTGTCCGT	GGACAAAACA	CTAAAAACAA	CGCCCGCACT	CGTAAAGGTA	660
AAGCTGTTGC	GATTGCTGGT	AAGAAAAAAT	AATATAGGAG	GTAAAAGTCT	TGGCTAAACC	720
AACACGTAAA	CGTCGTGTGA	AAAAGAATAT	CGAATCTGGT	ATTGCTCATA	TTCACGCTAC	780
ATTTAATAAC	ACTATTGTTA	TGATTACTGA	TGTGCATGGT	AATGCAATTG	CTTGGTCATC	840
AGCTGGTGCT	CTTGGTTTCA	AAGGTTCTCG	TAATCTACA	CCATTCGCTG	CTCAAATGGC	900
TTCTGAAGCT	GCTGCTAAAT	CTGCACAAGA	ACACGGCTT	AAATCAGTTG	AAGTTACTGT	960
AAAAGGTCCA	GGTTCTGGTC	GTGAGTCAGC	TATTCGTGCG	CTTGCTGCCG	CTGGTCTTGA	1020
AGTAACAGCA	ATTCGTGATG	TGACTCCAGT	GCCACACAAT	GGTGCTCGTC	CTCCAAAACG	1080
TCGCCGTGTA	TAATCATCGC	ATTACACTGC	TTTCGTTTA	AGAGGGAGTA	ACTAAATGAT	1140
CGAGTTGAA	AAACCAAATA	TAACAAAAT	TGATGAAAAT	AAAGATTATG	GCAAGTTTGT	1200
AATCGAACCA	CTTGAACGTG	GCTACGGTAC	AACTCTGGT	AACTCTCTTC	GTCGTGTACT	1260
TCTAGCTTCT	CTACCAGGAG	CAGCTGTGAC	ATCTATCAAC	ATTGATGGTG	TGTTACATGA	1320
GTTTGACACA	GTTCCAGGTG	TTCGTGAAGA	CGTGATGCAA	ATCATTCTGA	ACATTAAAGG	1380
AATTGCACTG	AAATCGTACG	TTGAAGACGA	AAAATCATC	GAACCTGGATG	TTGAAGGTCC	1440
TGCTGAAGTA	ACAGCTGGTG	ACATTTGAC	AGATAGCGAT	ATTGAAATTG	TAATCCAGA	1500
TCATTATCTC	TTTACAATCG	GTGAAGGTTC	TTCTCTAAA	GCGACTATGA	CTGTTAACAG	1560
TGGTCGTGGA	TATGTACCTG	CTGATGAAAA	AAAAAGGAT	AATGCACCAAG	TTGGAACACT	1620
TGCTGTAGAT	TCTATTCTATA	CACCAGTTAC	AAAAGTCAC	TATCAAGTGG	AACCTGCTCG	1680
TGTAGGTAGC	AATGATGGTT	TCGACAAATT	AACTCTGAA	ATCTGACAA	ATGGAACAAT	1740
TATTCCAGAA	GATGCTTAG	GGCTTCAGC	ACGTATTTG	ACAGAACATC	TTGATTTGTT	1800
TACAAATCTT	ACTGAGATTG	CTAAGTCAC	TGAAGTGATG	AAAGAAGCTG	ATACTGAATC	1860
TGACGACCGT	ATTTTAGATC	GTACGATTGA	GGAACTGGAC	TTGTCTGTGC	GTTCATACAA	1920
CTGTTAAAAA	CGTGCCGTA	TCAAACTGT	GCATGATTG	ACAGAAAAT	CTGAAGCAGA	1980
GATGATGAAA	GTACGAAATC	TTGGACGCAA	GAGTTGGAA	GAAGTGAAC	TCAAACTCAT	2040
TGATTTGGGT	CTTGGATTAA	AAGATAAATA	AAGGAGGAAT	ACATGGCTTA	CCGTAAACTA	2100
GGACGCACTA	GCTCACAACG	TAAAGCAATG	CTTCGCGATT	TGACAAC	TGTTGATC	2160
AACGAATCAA	TCGTGACAAC	TGAAGCTCGT	GCTAAAGAAA	TCCGTAAAAC	TGTTGAAAAA	2220

878	
ATGATTACTC TAGGTAAACG TGGTGATTTG CATGCACGTC GTCAAGCAGC TGCTTCGTA	2280
CGTAATGAAA TCGCATCTGA AAACTATGAT GAAGCAACTG ATAAGTACAC TTCTACTACA	2340
GCACCTCAAA AATTGTTCTC AGAAATCGCA CCTCGTTATG CTGAACGTAA CGGTGGATAC	2400
ACTCGTATCC TTAAAACCTGA ATCACGTCGT GGTGATGCA CGCCAATGGC GATCATCGAA	2460
TTAGTATAAA ATCATCAATT TTGTTGAGTG TTATGATGAT GGAGTCTTGT GCTCTTAGTC	2520
TAGCTCTGGT CTACCGCTAG GATTTCGGTC CTAGCGGGAA CACTCATCAT AAGTTGGGAT	2580
AGTAGACGCT TGTTCACGAA ATTGTTTTTT TCTTAAGAAC AACTTCGTAA GCAGGCGTTT	2640
TTGAGTATTT TCGTTAGAAT TATGCTATAC TATTTGAAAA GAATCCTGTT TAATGTTAAG	2700
GTTTCTTATT TTAAGAAGAA TTGGAGTTA CTTATGAAAG CCATTATAAC TGTTGTTGGT	2760
AAAGATAAAAT CTGGAATTGT TGCAGGTGTT TCTGGTAAAA TTGCAGAATT AGGATTGAAT	2820
ATTGACGATA TCTCTCAAAC TGTCTTGGAT GAATATTTA CGATGATGGC TGTTGTATCT	2880
AGTGATGAAA AGCAAGATTT TACCTATCTT CGTAATGAAT TTGAAGCTTT TGGGCAAAC	2940
TTGAATGTA AAATCAATAT TCAGAGTGCA GCGATTTTCG AAGCTATGTA TAATATCTAG	3000
GAGGTCATCA TGGATATTAG ACAAGTTACT GAAACCATCG CCATGATTGA CGAGCAAAAC	3060
TCGATATTA GAACCATTAC CATGGGGATT TCTCTTTGG ACTGTATCGA TCCAGATATC	3120
AATCGTGCTG CGGAGAAAAT CTATCAAAAA ATTACGACAA AGGCGGCTAA TTTAGTAGCT	3180
GTTGGTGATG AAATTGCGGC TGAGTTGGGA ATTCCTATCG TTAATAAGCG TGTATCGGT	3240
ACACCTATTCT CTCTGATTGG GGCAGCGACA GATGCGACGG ACTACGTGGT TCTGGCAAAA	3300
GCGCTTGATA AGGCTGCGAA AGAGATTGGT GTGGACTTTA TTGGTGGTTT TTCTGCCTTA	3360
GTACAAAAAG GTTATCAAAA GGGAGATGAG ATTCTCATCA ATTCCATTCC TCGCGCTTG	3420
GCTGAGACGG ATAAGGTCTG CTCGTCAGTC AATATCGGCT CAACCAAGTC TGGTATTAAT	3480
ATGACGGCTG TGGCAGATAT GGGACGAATT ATCAAGGAAA CAGCAAATCT TTCAGATATG	3540
GGAGTGGCCA AGTTGGTTGT ATTCGCTAAT GCTGTTGAGG ACAATCCATT TATGGCGGGT	3600
GCCTTCATG GTGTTGGGA ACCAGATGTT ATCATCAATG TCGGAGTTTC TGGCCTGGT	3660
GTTGTGAAAC GTGCTTGGGA AAAAGTTCTG GGACAGAGCT TTGATGTAGT AGCCGAAACA	3720
GTAAAGAAAA CTGCCTTTAA AATCACTCGT ATCGGTCAAT TGGTTGGTCA AATGCCAGT	3780
GAGAGACTGG GTGTGGAGTT TGGTATTGTG GACTTGAGTT TGGCACCAAC CCCTGCGGTT	3840
GGAGACTCTG TGGCACCGTGT CCTTGAGGAA ATGGGGCTAG AAACAGTTGG CACGCATGGA	3900
ACGACGGCTG CCTTGGCCCT CTTGAACGAC CAAGTTAAAA AGGGTGGAGT GATGGCCTGC	3960
AACCAAGTCG GTGGTTTATC TGGTGCCTTT ATCCCTGTTT CTGAGGATGA AGGAATGATT	4020

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GCTGCAGTGC AAAATGGCTC TCTTAATTAA GAAAAACTAG AAGCTATGAC GGCTATCTGT	4080
TCTGTTGGAT TGGATATGAT TGCCATCCCA GAAGATACGC CTGCTGAAAC TATTGCGGCT	4140
ATGATTGCGG ATGAAGCAGC AATCGGTGTT ATCAACATGA AAACAACAGC TGTCGTATC	4200
ATTCCCAAAG GAAAAGAAGG CGATATGATT GAGTTTGGTG GTCTATTAGG AACTGCACCC	4260
GTTATGAAGG TTAATGGGC TTCGTCTGTC GACTTCATCT CTCGCGGTGG ACAAACTCCA	4320
GCACCAATTTC ATAGTTTAA AAATAAGAA AATAGGAGAA ATTTTAAGTT CTATTAAAGA	4380
TTAGACGTGT ATACTATAAT CATTAAATAA AGACCTCCTA ATATTATTG AAACAGATAA	4440
CACTGAATTA GTTTGAATTG GATTTTCATC TAATATCTT ATTTAATGAA CTCCTAAACT	4500
TTTTCATAAT AATCTCCTTC AAAAGTCGCC TGTATGGGTG GCTTTTATTT TATCATTCTAT	4560
GATATAATAG AAGCAAACGG AGGACGGAAA ATGGTAAAG TACGATTGTA TTTGGTACGT	4620
CATGGCAAGA CCATGTTAA CACGATTGGT CGCGCGCAAG GTTGGACGAG TACTCCCTTA	4680
ACTGCTGAAG GTGAACGAGG GATTCAAGAG TTAGGAATCG GTTTGCGAGA ATCTGATCTA	4740
CAGTTGAGC GTGCTTATTG GAGTGTATTCT GGTCGTACCA TTCAGACCAT GGGATTATC	4800
CTTGAAGAAC TTGGCTTGCA GGGGAAATC CCTTATCGCA TGGACAAGCG TATCAGAGAA	4860
TGGTGTTCG GTAGTTTGA TGGAGCCTAT GATGGCGATC TTTTCATGGG CATTATTCC	4920
CGTATCTTTA ATGTGGACCA CGTTCACCAA TTGTCTTATG CTGAACCTGGC TGAGGGCTTG	4980
GTAGAGGTGG ATACAGCTGG TTGGGCTGAA GGCTGGAAA AACTCAGTGG CGGAATCAAG	5040
GAAGGCTTTG AAATGATTGC AAAAGAAATG GAAGATCAAG GTGGAGGTAA CGCCCTTGTT	5100
GTCAGCCATG GAATGACTAT TGGAACATT GTTTATCTGA TTAATGGCAT GCATCCGCAT	5160
GGTCTGGATA ATGGTAGCGT GACAATCCTT GAATATGAGG ACGGCCAGTT TAGGGTTGAA	5220
GTGTCGGTG ACCGTAGTTA CCGAGAGCTA GGACGTGAGA AGATGGAAGA AGGCTCTATT	5280
TAATCAGTCT AGACTGCTT GCCATGAGCT AGGGATTGTA TAAGAATATC AAGATAAGAA	5340
AAAACAGCCG AGGGCACTCC TTTGGCTGT TTTTGATGTG GAAAACCTAAA GTGTAATGCT	5400
ATTGCTTTTA GAGATTTCA TAAACAAGAG CAAGGAACCT ACTGTTAGAA CAGTCAGGAT	5460
AGTTGACAAG GTTGCGCTA CACCGTAATT TCCTCTGAGA ACCTCTGTAT AAATAGCTAC	5520
AGTCATTGTT CTTGTTTGA CATTGTAGAG GAGGATAGAA GTAGAGAGTT TTGAAATCAT	5580
TGTGACTCAA GATAAGATGG CTCCAGAAAT GATACCAGAT AGCATCATTG GAGTTGTAAT	5640
CTTAGCAAAG GTATTGAGAC GACTACTTCC TAAGCTTCA GCAGCTTCTT CAATACTTGG	5700
TGCTATTGTTG TGTAAGCTAG CAACAGATGA GCGAATAGTA TAAGGTAATC TTCTGGCAGA	5760

880	
TAGAGACATA ATCAAGATGA AAGCAGTCCC TGTAATCATA AGAAATCCAC TTCCAAATAG	5820
ACCACTATTG AAGGAAGAAA TGAAGGCAAT CCCTAGAACG GTTCCTGGTA CAATATAAGG	5880
TACCATACTG AGGCTGTCAA TTAAGTTGT AAACAAATTG CGTTTCTAA CGGCTAGGTA	5940
GGAGATAAAAT GTCGCAAATA GAACAACCTAG AACTAAGGCA ATCAAAGGGA TACGAATGGT	6000
ATTGAAAATA GCAGATCCC TACGATGGAA AGCTACCTTG TAACTGTTG GAGAATAACC	6060
TTTAACAGAT ACCATACCTG ATGTTTTAG GAAAGAGGTA TAAATTAAGT AGATTTGAGG	6120
TAAAACAGAG ATAAAGATAA TTCCGTAGAC TGTTGCATAA ATGGCAGCCA TTTTCCTTT	6180
TGTAGTTTT TTAGGCTCAA TTGGATGGAG CAGATTCATG CTGAAACTGT AGCGGTTGC	6240
AAATGTGTTT TGGATAAGGA AAATTGCCAA GGCAATGATA ATCGCCATAA TTGCAAAAGC	6300
AGAATTCCT CCAACCTCGC TAATAAATTG GGTATAAATC AGGACAGGGA AAGTCCGATA	6360
CCCTTCGCCA ATCAACATAG GCGTTCCAAA GTCTGAGAAT GCTCTCATAA ATACAAGCAA	6420
GGAGCTGCTA GTAAGGTTGG AACTAGGAGA GGTAAAACAA CCGTTACGAT AGGTTAAAT	6480
CCGAAGGACC CCATGTTTC AGCTGTTCA AGTAGAGAAT TGTCAATACT GTTCATTGTT	6540
CCAGCAACAT ATAGAAATAC CAGTGGGAAT AGTTGCAGTG TAAAGACAAG TACAATTCT	6600
TTGAATCAAT AAATATCGAT AGCTGGAAGA TAAAGGGCAT TTGTCAAAAAA TTTAGTGATG	6660
ACCTCATTTC GTCCTAGCAA GAGAACCCAG GAGTAGGCTC CTACGAAAGG AGCTGACATG	6720
GAAGCAATGA TAATCAATAT TTGTAGAAAT TTCTTCCCCT TGAAGTCATA CATAGAGAAG	6780
AGATAAGCTA ATAGGGTCC TACAACTAAG GAAGTGATAG TAGCGGTAAT GGAAACCTTG	6840
AAACTGTTGA CTAGTGTCTC AGAGTAGTAG GCTTTACTAA AGAAAGTGAC AAAATTAGCT	6900
AGTGAGAATT GTCCTTCATG TATAAGTGCT TGCTTGAGCA CGGTAACGAT AGGATAAACG	6960
AGAAAGATAG GATAGGTAAG AAAGAGGAAG AAAGAGGAAA CTGTCCAAAT ATTTAGTTT	7020
TTACGTTCCA TGGTTGACTC CTTTTATCAG GTTTGGGAA CCATCTGCAG AAAAGATGTT	7080
TAATTTTGTC GTATTGATTC GTAGACGAAT ACGATTGCCT TTTTGTAGAT CTTCTTCAAA	7140
AGTTGATTCT TCACTAACTT GAATTTTGAGA GGCAAAACCT GTCTCAATGA AATAATCCGT	7200
ATTTAGTCCA AGATAGACGC TATCTCTAAT AGTTCTTCATG ATATCTCCAG ATTCACTTT	7260
GATAAACTCT TCGGGACGAA TGCTTACATG AATAGCTTGC TCCTCAACCT GATCAAGAGC	7320
TGGCATTCGA AGGGCATAGC CATCTGAAAA GACGATATAA GCGCCGTCGC TCCGTTTTTC	7380
AAGATTGGCA GGGATAATAT TTGTGCGTCC GATAAAAGGTT GCCACAAACT CATTAGCTGG	7440
TTTATGATAG AGTTCTTTG GTCGGCCGAT TTGTTGGATC ACCCCATCTT TCATAACAGC	7500
AATTGGTCT GAAATAGCCA TGGCTTCTTC TTGGTCGTGG GTTACATAAA CAGTTGTAAT	7560

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TCCCCACTTCG	TGTTGGATTT	CTCGGATGGC	TTGACGCATA	TCCAAGCGAA	GTTTGGCCTC	7620
CAGATTACTA	AGTGGCTCGT	CCATGAGGAG	AACACTTGGA	TTAACCGCTA	AGGCGCATGC	7680
CAAGGTGACA	CGTTGTTGTT	GTCCACCACT	GAGTTTATCG	GGCTTTCGAT	CCGCATATTG	7740
AGCAATTGC	ATGAGTTCAA	GATACTTGGT	GGTCTGTTGA	ATCAATTCTT	CTTTTGGAAC	7800
CTTCTTTGC	ATAAGACCAA	AAGCAACGTT	GTCTCGGACA	GTCAAATGTG	GGAAAATAGC	7860
GTAGTTTG	AAAACCATCC	CGATATTGCG	TTTGCCTGGGT	TCCATATTAT	TGATTTTTGT	7920
ATCATCGAAG	TAAAATTCTC	CACCTTCGAT	ACTGTTGAAA	CCTGCAATCA	TACGAAGAAG	7980
GGTCGTTTC	CCACATCCTG	AAGCTCCAAG	AAGGGTAAAG	AGACTTCCTT	TTGGAATTGT	8040
AATGTTCAA	TTCTCAATAA	CAGGGACATC	GTGGTAGATT	TTTTTGGCGT	TAATAATT	8100
GATCTCACTC	ATAGTGAACC	TCTTTTACTG	TTTAGATTGG	ATATCTGTAA	AGACTTCGTT	8160
GTATTTCTTA	ACGATATCTG	ATTTATTCTT	GATGACATAA	TCATAATCTT	CAGTGAGTGT	8220
TTTGATTTTG	TCAATTGGTT	TCATGTTTTC	GCTTGTGTTA	GCATTTTAC	GAACAGGACG	8280
GTTAGTAGTG	GTTGTACCAA	GTGTATCTTG	TACTTCTTGA	GAGATAATAA	AATCGATAAA	8340
TTTCTGGCA	TTTCCATAT	TTTAGATTT	TTAACGATA	GCAGCACTAG	CAGGTAGGAA	8400
GACGGTTCC	TCTTTGGAT	AGACTACCTT	AATGTTAGCT	CCGTCATTTA	AGAGTTAAC	8460
TGCTGGATCT	TCATAAGAGA	GACCAACAGC	CATTTCTCCA	TCAGCGACTA	CTTTATAGAC	8520
ACTAGATGAA	CTTGAACCGA	TTTACCATC	AATAAGTGTG	AAAAGATCTT	TTACATAAGA	8580
CCAAGCCTTA	TCATCTTGT	AACCACCTTG	AGCTTGTAGC	ATATTGTTA	ATTGAGCAA	8640
GGCGCTAGAA	GAGTTGCTG	GGTCAGCAGT	TGCGATTTT	CCTTTAGTT	CAGGTTGAA	8700
AAGATCGTTA	TATCCTTCGA	TGTTCATGCC	TTAGTTAAA	TCAGGGTTGA	CGATTAAC	8760
ACTACCAC	AGTGTATAAG	GAGTAGAGTA	GCCAGTTGTG	TTTGATATT	CTTGATAAC	8820
ATTATCATT	TCTTTGAAG	TATAGTTTC	AAAGAGTTCT	CCGTGGTAG	TATATTGTGT	8880
ATAAGAACCA	CCAAAGATAA	CATCAGCTAC	AGGAACCTCT	TTTCTGACT	CTAGTTTT	8940
GAAAAGTTCT	CCAGTACCAAG	CTTGAATCAG	TTCTACTTTG	ATACCATATT	TTCTTCAAA	9000
GGCAGGAATA	GTTGCTCCAA	TTAACGCCCTC	TGAGTTGGT	GAATAAACGA	CTAGCGAAC	9060
GCCGTCTCC	TTATCAGATG	AACTGTCATC	GGCAGATTCA	TTAGAAGAAC	AAGCAGCATA	9120
ATACATCCAT	TTCTTTTCA	TGATGGATAC	CTCCGTTGTG	TTATTTAAGT	TTATTTAAA	9180
ACAATGTAAG	CGTTTTAAA	ACATACAATT	CTATTCTATA	GTGTATTGAA	TCTATAACAG	9240
TACACTTTGA	CTGCTAAAT	ATTTCTATAA	ATTAATTGAA	CTTTCCTGAT	AGAGATGTT	9300

882	
ACATCTTATT TCAATTCACT ATATTAGAGT AAAATTCTCT ACAAAAAGAA GAATAGCCTA	9360
TTTTACTATT CTTCTGAGTG ATTTCAATTC CTTTGGGGAA ATATGGAGAT ACTTTTAA	9420
TCCTGACAAA TGGTTGTTTC TTTTCTAAA TCGGTGATAC TGTATCGGAG AATGCGCGTG	9480
AGGTACACAAA GGCTGCGATA GAGCTTCTAT GGAGAATTTC TTTTGGAGA GATTTTTAA	9540
AGGAATGAGA CATCCGCTAC CTCCTGGAA GGTTTTG	9578

(2) INFORMATION FOR SEQ ID NO: 128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 128:

CGGGCTGTTG TGACGATTCT TATTCTATC TGTGTTATCT TTTTGGGAAC TATTTTGGGT	60
GTTGCTTGG CTTTTGGCA ACGTTCAAAG TTTAAACCGC TTGTTTGGTT GGCAACTTG	120
TACGTTTGGA TTTTCCGTGG GACACCGATG ATGGTTCAAA TTATGATTGC CTTGCTCTT	180
ATGCATATCA ATGCTCCGAC TATTCAAGATT GGAATTTCAG GTGTTGATT TTGCGCTCTG	240
ATTCCAGGGA TTTTGATTAT CTCTATGAAT AGTGGTGCTT ATGTTTCGGA GACTGTTCGT	300
GCCGGAATCA ATGCGGTTCC AAAAGGTCAG CTAGAAGCGG CTTATTCGCT AGGGATTCTG	360
CCTAAAAATG CGATGCGTTA TGTGATTTG CCACAAGCAG TCAAAATAT CTTGCCAGCA	420
TTGGGGAACG AATTATCAC CATTATCAAG GACAGCTCCC TCTTATCAGC TATTGGGTC	480
ATGGAGTTGT GGAATGGGC TACAAACAGTT TCTACAACAA CCTATCTACC TTTAACACCA	540
CTTTTATTG CAGCATTAA CTACTTGATT ATGACCTCTA TTCTGACAGT AGCCTTGAAA	600
GCTTTTGAAA AACATATGGG ACAAGGAGAT AAGAAATAAT GACAGAAACC TTGATAAAAAA	660
TTGAAAATTT ACATAAATCC TTTGGAAAGA ATGAAGTATT GAAGGGCATC AACCTCGAGA	720
TTAAAAGAGG AGAAGTTGTC GTTATCATCG GTCCTTCAGG GAGCGGGAAA TCTACCTTGC	780
TTCGCTCTAT GAATTGTTG GAAGAAGCAA CCAAGGGAA GGTTATCTT GAGGGAGTCG	840
ATATTACGGA CAAGAAGAAT GACCTGTTG CCATGCGTGA GAAGATGGC ATGGTTTTTC	900
AACAATTCAA TCTCTTCCT AATATGACTG TGATGGAAA TATCACCTTG TCCCCTATCA	960
AGACCAAAGG TGACAGTAAG GCCGTTGCAG AGAAAAGAGC TCAGGAACCTT TTGGAAAAAG	1020
TTGGTTTGGC AGATAAGGCA GACGCTTATC CACAGAGTTT GTCAGGTGGC CAGCAACAGC	1080
GGATTGCCAT CGCGCGTGGG TTGGCTATGG AACCAGATGT TTTGCTCTT GACGAGCCAA	1140

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CTTCAGCCCT AGATCCTGAG ATGGTTGGAG AAGTTCTGGC TGTTATGCAA GATCTAGCCA	1200
AGTCAGGAAT GACCATGGTT ATCGTAACAC ATGAGATGGG ATTTGCCCGT GAGGTGGCAG	1260
ATCGTGTCACT CTTTATGGCA GACGGTGTGG TTGTTGAAGA CGGAACACCT GAGCAGATT	1320
TTGAACAAAC CCAAGGACAA AGGACTAAAG ACTTCTTGAG TAAGGTTTA TAAGTTAGCT	1380
TTGTTTAGCT ATTTGTAGCC AGCTTTAACAC GTTAAAGAGA AGATTAGTGA AAAGCTCAAC	1440
CAGAGCTTT TCTTATAGTT TAAAGCTATA GGATTGCCTA GGAAAGAAAGT GTTAGAGCTA	1500
CATTGTATTT TTTGGTATAA TTAAAGATAT TTGTAAGAAA AGAGAAGTGA TATGACACAG	1560
ATTATTGATG GGAAAGCTTT AGCGGCCAAA TTGCAGGGGC AGTTGGCTGA AAAGACTGCA	1620
AAATTAAAGG AAGAACACAGG TCTAGTGCCT GGTTTGGTAG TGATTTGGT TGGGGACAAT	1680
CCAGCCAGCC AAGTCTACGT TCGCAACAAG GAGAGGTCAG CCCTTGCAGG TGGTTTCCGT	1740
AGCGAAGTAG TACGGGTCC AGAGACCATT ACTCAAGAGG AATTGTTAGA CCTGATTGCT	1800
AAATACAATC AGGATCCAGC TTGGCATGGG ATTTGGTTTC AGTTGCCATT ACCAAAACAC	1860
ATTGATGAAG AGGCGGTTCT ATTGGCTATT GACCCAGAAA AGGATGTGGA TGGTTTCCAT	1920
CCTCTAAACA TGGGGCGTCT TTGGTCTGGT CATCCAGTC TGATTCCTTC GACACCGCA	1980
GGAATTATGG AAATGTTCCA TGAATATGGG ATTGACTTG AAGGTAAAAA TGCAGTCGTC	2040
ATCGGTGAT CCAATATTGT CGGAAAACCT ATGGCCAGC TTCTTTGGC AAAGAATGCA	2100
ACAGTAACCT TGACTCACTC ACGTACTCAT AATCTTCCA AGGTGGCTGC AAAAGCAGAT	2160
ATTCTGGTTG TTGCAATCGG TCGTGCCAAG TTTGTGACTG CTGACTTTGT CAAACCGAGT	2220
GCGGTAGTCA TTGACGTTGG GATGAACCGC GATGAAAATG GTAAGCTCTG TGGGGATGTT	2280
GATTATGAGG CGGTTCCCC ACTTGCTAGC CACATTACGC CAGTCCTGG AGGTGTCGGT	2340
CCTATGACCA TTACTATGCT GATGGAGCAA ACCTATCAGG CAGCACTTAG GACATTGGAT	2400
AGAAAATAAG ATAAAAATTT TCTGAGGAAA GTGTATTTTC TATAGCTATA TCTAAAATGA	2460
TAGAAATGAA TATTAATTT TAGAAATAAG TTTATAAAAG GAGGTTTGCG CCTCCTTTT	2520
GTTGTATAAT GGAGTGAGGT GATTAGATGA TTTTAAAAAT TTATAATGGG GAATATAGTT	2580
TACAATGGGA TGGAATATAC TACCTAGCAC TAATTGATTA TCCAAATATT CAAGAGTGGG	2640
AATTAGAAAA AATTGCTAAA TTTATAGCTT ACGAAAAACT TCATAAACGT CAAACAAAGTA	2700
TTGAGTGTGC TGATTCTGT TTAAAAAAAG AAATTTAGA TTACATCTGT CAGCATCCCT	2760
TTCTGCCACC ATTTACTCCT ACAGATAAAA GAGTAGCCTC GACTTATGAC CTACATAAGA	2820
GGTTAGTGAC TTCAGACTAC TGTAGTCATA CTACGACTAT AGATGCAGCG ATTTCTATTT	2880

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TTAAAACCTGG	TCGTCTTTA	TCTGCTGTGA	AAGCCTTTGG	GCGAGATGCT	GAGGAGTTGG	2940
TTTGGGATAG	TCGAAATGCT	GCATCTGATC	CGATAGATTA	TTTGACTAT	GTCATGTTAG	3000
GGTGGTCAAA	TACAAGTTCT	GGTTATCGAT	TGGCGATGGA	GCGTTATTA	GGTCGAGCTC	3060
CTTCAGAGAA	AGAATTACAA	GACAAGTTA	TTCCTGGAGT	AAGTTTCAT	TTTATCTATA	3120
CAGATTTGAT	TAAAGTCCT	GGTTATATTT	TTGATGGTTA	CCATGCTGTA	AAAATTAAGG	3180
ACATGCTTAA	TTTATTAAGT	GAGTTGTATA	TTTGCATTAT	TCCAACTCAT	AATAAGAGCC	3240
AATTTGAAAA	TATTATTCCA	ACCAAAATAC	AAGATAGGGT	GTATTATCTT	GACTATGCTG	3300
GAGAAGACTT	AGAAGAGTGG	ACTAAGAAAG	TCTATCAAGT	TCTTTAAAAA	CAATCAGATA	3360
AAGGATAGTT	GAGGAAAAAA	CGATGAAAGT	GATTGATCAA	ACCTTACTAG	AAAAAGTCAT	3420
TATTGAACGT	TCTTGTACAA	GTCATAAAGG	AGACTACGGT	CGTCTGCTGT	TGCTTGGTGG	3480
GACTTATCCT	TATGGTGGTG	CCATCATCAT	GGCTGTTTA	GCAGCTGTAA	AAAGCGGTGC	3540
AGGATTGGTA	ACCGTTGGAA	CGGACAGGGAA	AAATATCCCT	GCTCTACACA	GCCATTTGCC	3600
TGAGGCTATG	GCCTTTCTC	TGCAAGATCA	GTAATTGTTA	CAAGAGCAAT	TGGAGAAGGC	3660
AGAAGTTGTC	TTGCTGGGC	CTGCTTTACG	AGACGATACG	TTTGGAGAAA	ATCTTGTAAA	3720
ACAGGTCTTT	GCTAGCTTAA	AAAAGAATCA	GATTTTGATT	GTAGATGGAG	GGGCCTTAAC	3780
CATCCTTGCT	AGGACAAGTT	TGTTGTTCC	ATCTAACAG	CTTATCTTAA	CTCCCCACCA	3840
AAAAGAATGG	GAAAAACTGT	CTGGTATTGC	TATTGAAAAG	CAAAACGAAG	GTACAACATC	3900
TAGTGCCCTG	ACTTCTTCC	CTCAAGGAAC	AATTTGGTA	GAGAAAGGTC	CAGCTACTCG	3960
TATTTGGCAA	GTTGGCCAGT	CTGATTATTA	CCAGTTAAAG	GTTGGCGGTC	CCTATCAGGC	4020
GACTGGTGGT	ATGGGTGATA	CACTGGCTGG	AATGATTGCA	GGATTTGCAG	GCCAATTCG	4080
ACAGGCCAGT	CTCTACGAAC	GTGTGGCAGT	AGCAACCCAT	CTTCATTCA	CCATAGCCCA	4140
AGAACTATCT	CAAGAAAATT	ATGTTGCTT	GCCGACGGAA	ATTAGTAATT	GTCTTCTAA	4200
AGTAATGAAA	AGATATGTCT	AAAATAGTTA	GACAAAAAT	GTTGATAATT	TGTATCATTA	4260
TTCTTAATTC	ACAAAAAACG	AACGTTTAGT	ATTCTTCTTG	CTAAGAAACT	AAATTGTTCA	4320
GTTTTTTTAC	TCTTGTAAAT	CTATTTTGT	TAGAGTTGAT	TTGGTTTACA	TCCGTACTTA	4380
AATTGATTG	TTAGAGCTCT	ACTTTATTA	AAAAAATTCA	ATTCAAGGA	TAAATAAGCA	4440
GTATTCTAAA	GGTACTTTA	GATGAAATAA	AAGCCTTAC	ATGGTATAAT	AGAGGTAGCT	4500
CTTTAATGGA	GGTGTGAG	TGGAAAATCT	GAAGAAAATG	GCAGGTATCA	CGGCTGCTGA	4560
ATTTATCAAG	GATGGGATGG	TTGTAGGGCT	AGGAACAGGT	TCTACTGCCT	ATTATTTGTT	4620
CGAAGAAATC	GGTCGTCGAA	TCAAGGAAGA	AGGCTTGCAG	ATTACAGCTG	TGACGACTTC	4680

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TAGTGTGACC	AGTAAACAGG	CTGAAGGGCT	CAATATCCCG	CTCAAGTCTA	TTGACCAAGT	4740		
AGACTTTGTC	GATGTGACAG	TCGACGGGGC	GGATGAAGTG	GATAGTCAGT	TTAATGGAAT	4800		
CAAAGGCGGT	GGTGGTGC	CCC TTCTCATGGA	AAAGGTGGTC	GCAACACCAT	CAAAAGAATA	4860		
CATTTGGGTG	GTGGATGAAA	GCAAGCTGGT	CGAAAAACTA	GGTGCTTTA	AATTGCCAGT	4920		
AGAACTGGTT	CAGTATGGT	CAGAGCAGGT	CTTTCGTCT	TTTGAACGAG	CTGGCTACAA	4980		
ACCAAGTTTC	CGTGAAAAG	ACGGCCAACG	TTTGTGACC	GATATGCAGA	ATTTTATCAT	5040		
TGACCTCGCC	TTGGATGTCA	TTGAAAATCC	AATTGCTTT	GGACAAGAAT	TGGACCATGT	5100		
CGTTGGTGT	GTGGAGCATG	GT	TTTATTCAA	CCAAATGGTG	GATAAGTAA	TCGTTGCTGG	5160	
ACGAGATGGA	GTTCAGATT	CAACTTCAAA	AAAAGGAAAA	TAGAAGGGGG	CATAAGATGT	5220		
CTAAATTAA	TCGTATT	CAT	TTGGTGGTAC	TGGATTCTGT	AGGAATCGGT	GCAGCACCAG	5280	
ATGCTAATAA	CTTTGTC	CAAT	GCAGGGTTC	CAGATGGAGC	TTCTGACACA	CTGGGACACA	5340	
TTTCAAAAC	AGTTGGTTG	AATGCCC	AA	ACATGGCTAA	AATAGGTCTT	GGAAATATT	5400	
CTCGTAAAC	TCCTCTTAA	AG	ACTGTAGCAG	CTGAAAGCAA	TCCA	ACTGGTA	TATGCAACAA	5460
AATTAGAGGA	AGTATCTCTT	GGTAAGGATA	CTATGACTGG	ACACTGGAA	ATCATGGAC	5520		
TCAACATTAC	TGAGCCTTTC	GATACTT	C	GGAAACGGATT	CCCAGAAGAA	ATCCTGACAA	5580	
AAATCGAAGA	ATTCTCAGGA	CGCAAGGTTA	TTCTGAA	AGC	AAACAAACCT	TATTCA	GGAA	5640
CGGCTGTTAT	CTATGATTT	GGAC	ACGTC	AGATGGAAAC	TGGAGAGTTG	ATTATCTATA	5700	
CTTCAGCTGA	CCCTGTTTG	CAGATTGCTG	CCCACGAAGA	CATTATT	CC	TTGGATGAAT	5760	
TGTACCGTAT	CTGTGAATAC	GCTCGTT	CGA	TTACCC	CTGA	GCGCCTG	CTTCTGGTC	5820
GCATCATTGC	TCGCC	TTAT	GTAGGTGAAC	CAGGTA	ACT	TCGTACG	GCAAACCGTC	5880
GTGACTTGGC	TGTATCTCCA	TTTTCCC	AA	CTGTTT	GGTA	AAAT	TGAAT	5940
TCGATACTTA	TGCTGTGGGT	AAAATCAACG	ATATCTTAA	CGGTG	CCTGGT	ATCAAC	ACTG	6000
ACATGGGTCA	CAACAAGTCA	AATAGTCATG	GAATTGATAC	ACTATTGAA	AG	ACTATGGAC	6060	
TTGCTGAGTT	TGAAAAGGA	TTCTCATTCA	CAAACCTAGT	TGACTTTGAT	GCC	CTTACG	6120	
GCCATCGTCG	TAATGCTCAC	GGTTACCGTG	ATTGCTTGCA	TGAGTTTGAT	GAAC	GCTTAC	6180	
CTGAAATTAT	CGCAGCTATG	AGAGAGAATG	ACCTCTCTT	GATTACTGCG	GAC	CATGGAA	6240	
ATGACCCAAAC	GTATGCCAGGA	ACGGATCACA	CTCGGGAAATA	TATTCCATTG	TTGGC	CCTATA	6300	
GCCCTGCCTT	TAAAGGAAAT	GGTCTCATTC	CAGTAGGACA	TTTTGCAGAT	ATTTCAGCGA	6360		
CTGTTGCCGA	TAAC	TTGGGT	GTGGAAACTG	CTATGATTGG	GGAAAGTTTC	TTAGATAAAT	6420	

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TGGTATAAGA	TGACGCGCTA	TGCTTTGCTG	GTGAGAGGTA	TCAATGTTGG	TGGTAAGAAT	6480
AAGGTCGTCA	TGGCGGAGCT	TCGTCAAGAA	TTGACAAACT	TGGGACTGGA	AAAGGTTGAG	6540
AGCTACATCA	ATAGTGGCAA	TATTTTCTTT	ACTTCGATAG	ATTCCAAAGC	CCAATTGGTT	6600
GAAAAGCTAG	AGACTTTCTT	TGCAGTCCAT	TATCCATTAA	TTCAGAGCTT	TTCTTTACTG	6660
AGTCTAGAGG	ACTTGAGGC	GGAACTTGAA	AATCTACCAG	CTTGGTGGAG	CAGAGACTTG	6720
GCACGAAAAG	ATTTTCTCTT	TTACACTGAG	GGTTTGGATG	TGGACCAAGT	CATCGCGACA	6780
GTTGAAAGTT	TAGAGCTGAA	AGATGAAGTG	CTTTATTTG	GAAAACTTGG	GATTTCTGG	6840
GGGAAATTTT	CTGAAGAATC	CTATTCTAAAG	ACTGCCTATC	ATAAGTACTT	GCTGAAGGTG	6900
CCTTTCTACC	GCCACATTAC	TATTCGTAAT	GCTAAAACCT	TTGACAAAT	TGGTCAAATG	6960
CTAAAAAAAT	AATAAAGGAG	ACACACAATG	ACATTTTTAA	ACAAAATCCA	TGAAACGTGCT	7020
ACTTTCCCTGA	AAGAAAAGGG	AATTGCAGCC	CCTGAGTTCG	GTCTAACCT	TGGATCAGGA	7080
CTTGGAGAAT	TGGCAGAAGA	AATCGAAAAT	CCAGTTGTAG	TAGACTATGC	TGAGATTCCA	7140
AACTGGGGCC	GTTCAACAGT	AGTCGGTCAT	GCTGGTAAAT	TGGTATATGG	TGAACCTGGCA	7200
GGTCGCAAGG	TCTTGGCTCT	TCAAGGGCGT	TTCCATTCT	ATGAAGGGAA	TCCCTGGAA	7260
GTGGTGACTT	TCCCAGTTCG	TGTGATGAAA	GTTCTTGGAT	TGGAAGGTGT	TATTGTAACC	7320
AATGCAGCTG	CGGGTATCGG	ATTTGGTCCT	GGTACCTTGA	TGGCTATCTC	AGACCATATC	7380
AACATGACGG	GGCAAAATCC	ATTGATGGGT	GAAAACTTGG	ATGACTTTGG	CCCACGTTTC	7440
CCAGATATGT	CTAGGGCCTA	CACACCAGAA	TACCGTGCCA	CTGCCCCTGA	AGTGGCTAAA	7500
AAACTTAATA	TCAAGCTTGA	TGAAGGTGTC	TATATCGGAG	TTACTGGTCC	GACTTATGAA	7560
ACACCAGCAG	AAATTCTTC	CTATAAGACA	CTGGGAGCAG	ATGCAGTTGG	TATGTCACG	7620
GTTCCTGAAG	TTATCGTGGC	AGCCCACCTCT	GGCTTGAAAG	TTCTGGGAAT	TTCATGTATC	7680
ACTAACTTTG	CGGCCGGTTT	CCAAGAAGAA	CTCAATCACG	AAGAAGTTGT	AGAAGTGACT	7740
GAACGTGTTA	AAGGTGATTT	CAAAGGCTTG	CTTAAAGCGA	TTCTTGTGA	ATTGTAAGAA	7800
AAAAGATTAA	AAAGGGGGAG	TGCCTCTGTT	TTTCAGGAT	TGACTGCTA	TCCGGATTAA	7860
AGAAGAAACA	GAGGAATACT	ATGAGCTTCT	TCCTGCTCTT	ATAACTGAAA	GAAGCGGAAG	7920
AATAGGTATG	TCTGATCTGA	TAGCCAGCAT	TGTGAAAGAC	AAGATTCTAG	GATACTAGCA	7980
TTAGCTTCCCT	AGCCAAGCAG	ACTAGTATGA	TAAGGAGAGA	TGAGAATGAA	TTGACTTTCT	8040
GAATTTCTCA	GTCTTATCAT	ATATAGCACA	ATGAGATTTG	GCTTGAGTCT	GCTTGAAAT	8100
AAACGAAAAG	AAAGATAAGA	AATAATGAAA	ATTGGTCAAC	GAATTATGCG	CTTTGGCATA	8160
AAAAATTAAG	TATCGGAGTT	GTATCTGTTG	TAGTCGGCTT	TGATTTCTAG	CTCCAGCTGG	8220

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AATTCAGCC	AATGAAGTAA	AGCAAGATGT	AACATCTGAA	GTGGTAATAG	GTGTGCTAGA	8280
TTCTAAGGAG	GAATTGAAAG	AGTCAGAAAA	TGATGCTCCA	AAACTAGAAA	CTCCTCTTAG	8340
AGAGGAGCCA	AGACTAGCTC	CTCAAACGCT	TCCGGAAGCA	AGTGAAGTTC	TTGAAAACAA	8400
AAGGGAAGAG	TCAAAAGTAG	AGATAACATA	ACCAAGCTCAA	GCGGATGATA	TCCGCAAGGT	8460
TGTTGGGAA	TTAGCCAAGG	ATATAAGTAT	TACTAAGTTG	TATATGACAG	GTCATTCTCT	8520
TGGATGTTAC	CTAGCTCAGA	TTGCAGCGGT	TGAAGCTTAC	CAAAATATC	CTGATTTTTA	8580
TAACCATGTA	TTGAGGAAAG	TGACAACTTT	CAGTGCTCCT	AAAGTGATTA	CTTCCAGAAC	8640
TGTTTGGAAAT	GCTAAGAATG	GTTCCTGGGA	TGTTGGTTTG	GAAAGTCGTA	AATTAGCTGT	8700
TAGTGGAAA	ATTAAGCATT	ATGTGGTTGA	TAATGACAAT	GTTGTGACTC	CCTTGATTCA	8760
TAATAATCGT	GATATTGTTA	CATTACAGG	TAATTCACGC	TTTAAACACC	GTTCTCGTGG	8820
CTATTTGAA	AGTCCAATGA	ATGATATTCC	TAACTTTAAT	ATTGGTAAAC	AAGCTACCTT	8880
GGATAAACAT	GGTTATCGTG	ATCCGAAATT	GGATAAAAGTG	CGATTCTTTA	AGAAACAGGC	8940
TCTGCCTCGA	TCTTCTAGTC	AACCAAGCGC	TGAACCAATG	GAAAATATTG	CCTCAGGAAA	9000
ACAGGTTACT	CAAAGTCGA	CAGCTTCGG	AGGAGATGCT	AGAAGAGCTG	TGGATGGCAA	9060
AGTCGATGGT	AACTATGGTC	ACAATTCTGT	CACTCATACA	AACTTCCAAT	CTAACGCTTG	9120
GTGCCAAGTA	GATTGGCTA	AAGAAGAAAC	CATTGCCAA	ATCAATATT	ACAACCGAAC	9180
AGACACTGCC	CAGGATAGAT	TGGCAAACCTT	TGATGTCATT	CTTTTAGACA	GTTCTGGTAA	9240
AGAAATTGAG	TGAAAACGTA	TAACATCTCC	TAAAGATGTG	TCAGCACAAA	TTACGATTAA	9300
CCATAAAAAA	CCGCGCTATG	TTCGGATTGA	GCTAGAAGGC	TATAATGCC	TCAGTCTTGC	9360
AGAAGTTGAA	GTTCCTGCT	TTATAGCTAC	GAATGCTGAA	ACGGCGACAC	AAGTTCTAA	9420
GCCAGTTCAA	CCAATCAGTC	AGACTCCTGT	GAAGGATAAA	ACATTGACAA	TTCAACACAG	9480
TGGAGCTTAC	ATTGCCCGCT	ACTCCATAAC	TTGGGAAGAA	GTTCCAGTAG	ATAAAGATGG	9540
AAACCAAGTT	GTTCGTAGTC	ATTCTTGGGA	AGGAAGCGGT	CGCAACCAGA	CTGCAGGTT	9600
TGTCCTCAAC	CTCCCAATCA	AAGAAAATAT	GAGAAATCTG	CGAGTTAAGA	TTGAGAAAAAA	9660
GACGGGCCTA	CTATGGAATA	GATGGCAAAAC	AATCTATGAA	AACAGACCAA	TTTTAGCTCA	9720
ACCCCACCGT	AAAATTACCC	ATTGGGGTAC	GACATTGAAT	TCCAAGGTGA	GTGACGATGA	9780
TGTCTTGTAA	TCTGATGGTA	GAATGACAGT	TAGTTGTCT	AGTTTATAAG	AAAGTACTAC	9840
CTGAGCTTGA	ATAGGACTCA	GGTAGCTCTC	TATGAAAGAA	CAAAATTAAT	ACTCAATGAA	9900
AATCAAAGAG	CAAACTAAGA	AACTAGCCGC	AGGTTGCTCA	AAGCACTGCT	TTGAGGTTGT	9960

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AGATAAGACT	GACGAAGTCA	GTCACATATA	TAATCCAAGG	CGACGTTGAC	GTGGTTTGAA	10020
GAGATTTTCG	AAGAGTATAA	ACAGAAAGGT	AGAGCGCGTG	TTCTAATTG	AACACGAGTA	10080
GAAAACTTT	CTAAAACAA	AAACGAAAGG	ATGGGTAAAC	TGTATTCGCT	GAACTGAATA	10140
CGGGCGACTC	TCCTCTAAAT	CAAATTAAG	AAAGGAATTG	ACCCCCACCT	AAAAGTAGTG	10200
GGAAAAAGAT	AGTTGATCTA	GCGAGCATCG	CTCACTGCAC	CCAACTCCTA	TTTCCCTTC	10260
GCTTTTTGAT	GGGTTTGGTA	TCTTCTCAA	TATAAAATAT	AAATAAAGA	AAGGTAGAGC	10320
GTGTGTTTG	ATTTGAACAC	GAGCGGAAAA	CTCGGAAAAT	AGATAATCTG	ACTGAAAAAT	10380
CAGGATTTCT	CGTCAGGTTC	CTAATTTCA	GTCGTTTCT	TCTCGCTCT	TGTATCATAA	10440
ATTATGTCTA	TCCATATTGC	TGCTCAGCAG	GGTGAAATTG	CTGATAAAAT	TCTTCTTCCT	10500
GGGGATCCTC	TTCGTGCTAA	GTTTATTGCG	GAGAATTTC	TTGATGATGC	TGTTTGTGTT	10560
AACGAAGTGC	GTAACATGTT	TGGTTACACT	GGTACTTACA	AGGGTCACTG	TGTATCTGTC	10620
ATGGGAACTG	GGATGGGAAT	GCCATCTATT	TCGATTTATG	CGCGTGAGTT	AATCGTAGAC	10680
TACGGTGTGA	AGAAATTGAT	TCGTGCGGGA	ACTGCAGGTT	CTTTGAATGA	AGAGGTTCAT	10740
GTTCGTGAAT	TAGTTTGGC	GCAGGGCGCT	GCAACCAACT	CAAACATCGT	TCGTAATGAC	10800
TGGCCACAGT	ACGATTTCC	ACAAATTGCT	AGCTTGATT	TGCTTGATAA	AGCCTACCAT	10860
ATCGCCAAAA	AACTTGGTAT	GAECTACTCAC	GTGGGAACG	TTTTGTCATC	TGATGTCTTT	10920
TACTCAAATT	ACTTTGAAA	GAATATCGAG	CTTGGTAAAT	GGGGAGTC	GGCTGTGAA	10980
ATGGAAGCAG	CAGCTCTTA	CTATCTGCT	GCCCAATACC	ATGTTGATGC	GCTAGCTATC	11040
ATGACCATCT	CTGATAGCTT	GGTCAATCCA	GACGAAGACA	CAACTGCAGA	AGAACGTCAA	11100
AATACCTTCA	CTGATATGAT	GAAGGTTGGT	TTGGAAACCT	TGATTGCGAG	ATAATTATAG	11160
CCAAAAAGGG	GCTCTTGTC	AACTGTAGTG	GGTTGAAAAA	AAGCTAAGCT	TGAGAAAGGA	11220
CAAATTCGTC	CCTTCCTTT	TTGATATTCA	GGGCGATAAA	AATCCGTTT	TTGAAGTTT	11280
CAAAGTTCCG	AAAACCAAAG	GCATGCGCT	TGATAAGTTT	GATGAGATTA	TTGGTCGCTT	11340
CCAGTTGGC	ATTAGAATAG	TGTAGTTGAA	GGGCGTTGAC	GATTTCTCT	TTGTTCTTTA	11400
GAAAGGTTT	AAAGACAGTC	TGAAAAAGAG	GATGAACCTG	CTTCAGATTG	TCCTCAATGA	11460
GTCCGAAAAA	TTTCTCAGGG	TCTTGTCT	GAAAGTGAAA	AAGTAAGAGT	TGATAGATCT	11520
GATAGTGGTG	TTTCAAGTCT	TCTGAATAGC	TTAAATCTT	GTCAAGAATT	TCTTTATTG	11580
TTAAGTGCAT	GCGAAAAGTA	GGGCGATAAA	AACGTTTATC	GCTsArTTTA	CGACTATCCT	11640
GTTGGATGAG	TTTCCAGTAA	CGCTGTGATAG	CCTTGTATTG	ATGAGATT	CGTTCAAAC	11700
GATTCTATAAT	TTGAACACGA	AAACGACTCA	TGGCACGGCT	GAGATGTTGG	ATAATATGGA	11760

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AACGATCTAG AACGATTTA GCACACGGAA AAAGCTGTT AGCCAAGTCA TAGTAAGGAC	11820
TAAACATATC CATCGTAATG ATTTCACTT GACAACGAAC GGCTCTATCG TAGCGAAGAA	11880
AGTGATTCG GATGACAGCT TGTGTTCTGC CTTCAAGAAC AGTGATAATA TTAAGATTAT	11940
CAAATCTTG CGCAATGAAA CTCATCTTC CCTTAGTGAA GGCATACTCA TCCCAAGACA	12000
TAATCTTGG AAGCCGAGAA AAATCATGCT CAAAGTGAAA GTCATTGAGC TTGCGAATGA	12060
CAGTTGAAGT TGAAATGGCC AGCTGATGGG CAATATCAGT CATAGAAATT TTTCAATTA	12120
ACTTTGAGC AATTTTTGG TTGATGATAC GAGGGATTTG GTGATTTTC TTTACCAGGG	12180
GAGTCTCAGC AACCATCATT TTTGAAsAGT GATAGCACTT GAAACGGCGT TTTCTAAGGA	12240
GAATTCTAGA AGGCATACCA GTTGTTCGA GGTAAGGGAT CTTAGACGGT TTTGAAAGT	12300
CATrTTTCTT CATTAGACTT CCACAATCAG GGCAAGATGG AGCCTCATAA TCCAGCTTAG	12360
CGATAATTTC TTTGTGGTA TCCATATTGA TGATATCTAG AATCTTGATG TTTGGTCTT	12420
TAATATCGAG CAGTTTGTG ATAAAATGTA ATTGTTCCAT ATGATTCTTT CTAATGAGTT	12480
GTTTGTCGC TTTTCATTAT AGGTCAATATG GGACTTTTT TCTACACAAA AATAGGCTCC	12540
ATAATATCTA TAGTGGATT ACCCACTACA AATATTATAG AGCCCAAAAA GGAAGCCCTT	12600
TATGAATTGT AGGACTTCCT TTTCTTATCC AGAAATTGAT CTAGCTCT CTGATTTCGA	12660
AGAATAGTGA CTTTATGTGA ATATTCTTGG CAAAGTTTT GGTAATTTC TTTTGAGTT	12720
TTGCGGACGC CCATCCAAA GAATCCATCT GATAAACTCC CACTCAAAGC GTTCAGGGCA	12780
ATCTACCGCC ATACTTTCTC TGACTTTCC ACGGTATTTA AGATAACGCT TAAAGGCTCT	12840
AAAGAGACAG GTCAATGGCG AAAAATTGAG AAAGATGATT TGGTCAGCTT CTTGCATTG	12900
TTCTTGGTAG TAGCACCAG AATAATTACC ATCGATGACC CAAGTTTAT GCTTGGTGAG	12960
AAAGTTTTT ATCTCGTTA ACATCCATTC GCAGTCACTG TCTTGCCAAAC CAGGTTGAAA	13020
TTGGAGTGTG TCCATGTGCA GTTTGGAAT GGAGTAGTAG TTAGATAACT TTTCTGCTAT	13080
AGTTGACTTA CCAGAACAG AATATCCGAT AATTGCGATT TTCATTTCT ACCTTTCCCT	13140
ATTTGGAGAC AAAAACACAG CCTCTATGGA CTGTTCTTA TTTAACAGT TTAGCTGAAA	13200
GACGAGCTTT ATCGCGCTT GCTTGTGTT TGTGAATCAA ACCTTAGTT TCTGCTTTAT	13260
CGATAGCTGA GCTAGCAGCA CGGAAAAGTT CTTCAGATGG GTTGCCTTCG AAAGCTTTA	13320
TAGCAGTACG CATAGCTGAT TTTTGAGCTG AGTTCTTTTC GATTCGTCTA ACGTTCAATT	13380
CAGCGCGTTT GATAGCTGAT TTAATGTTG CCAATGGTCT TACCTCCATA TTTACTAACT	13440

(2) INFORMATION FOR SEQ ID NO: 129:

890

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 129:

CCTTTTTTCA	AAAACTAGAT	ACTAGTCTAT	CAAAAGTAGG	AAAGGGTTTC	AAGAAAATTG	60
ATGGAAATT	TTTGAAAAT	CATAGAACTA	TTAGCTAATC	CCTAGTATTG	AAAAGACTGG	120
ATAGCTTCTT	TCAGGTCATC	TTGTAAACTA	TTCTCTGGT	CAAGTTGGAC	ATAGACTTCC	180
ACCAGACAGG	ATCTAAAGTT	GGAAAATTG	AAAAAATCCT	CCCTTCTTC	TATCGGAAAA	240
TCAACAGTTT	TTATCCAAGA	AGCTACTTGT	TCTTGCTCCA	ACTTCCCTTG	TAAAATAGGT	300
TCATAGATCA	CTCTGCTAA	ACGCCAATCC	TCATCATCTG	TAAAGCGAAT	CGACATTCTT	360
TTAAATAGTT	GGCCAAGTAT	ATCAAATACT	TCATGAACTC	TGTTTTAGG	AAAGTCTGGA	420
TGACAAACCA	CCTCTGTCAG	AAATCGGCT	CCATGTGCAA	AAGCGTGAAC	CCAACCATAC	480
TGACTTGAGA	AAACCCCTGT	ATCCTTTCT	TTTGAAAGAT	AGTGCAAGCC	TTGATTTAAA	540
AGGACATTAC	GAATTCTGG	AGAAGGATTT	CCCAAATGAT	CAAACAAACCA	CTGGATTTCT	600
TCCTGGTTAT	AATTTGGTTT	TTCTTCTGCT	ATTTTTCTTA	GTAAATCTTG	ATACATGGTC	660
AATACCTCTA	CATTTCTAGC	AACTGTTCAA	AAAGGCAGTC	TTAAATGACT	CAATATTGAA	720
TTCTCAATTA	AATACAATCT	GATATAAAAT	GACGTAAATA	ACTATCAATA	CCAGTTCTAC	780
AGTAAGTTCA	AATTTAACAT	CACGACCTTC	AACGACATT	TTGAAAATAG	CTACAACCAA	840
GACAAATAGA	ATGACGCTTA	ACAAGCCCAT	AAACATCATT	CTAAAAAATT	TTTCTATTCC	900
CCTACTCTCC	CAACTCAGCA	CTATAGGAGA	TAATCTGGTC	AACTGTGTCA	GACAAGAATT	960
GGATGGTATC	ACGGAGTGGT	TTGTCTGTTG	AAATATCAGC	ACCGATAATC	ATGGCTGACT	1020
CAAGTGGTGT	CTTGCTACCA	CCTGATTGAG	GGAGATTGAG	CCAGTCTTCA	GCTCCAGTTT	1080
CAGAATGTTT	TAGATGAAGG	TAACCAGCAG	TCGAGATAAC	TAGTCCTGCT	GACTAAGTGT	1140
AACTATACAA	GCCCCATATAG	TAGTGAGCTT	GGCGCATCCA	AGTCAGAGTT	GCATCATCGT	1200
CAATTTCAAT	AGCATCTCCC	CAGAAATCCG	TCAAAACTTC	CTTCATAATG	CTGTTGAGCT	1260
TGCTTGCTCC	AAAGGTCTCC	CCTTCTTCAA	TCAATGTATA	CACCTTACGC	TGGAAGGCGG	1320
CTTCCAAGAG	GTGGGTGATA	AAGTTATGGA	AGTAGGTGTC	TGTCAAGCGA	TGAGCCAGAG	1380
CGAAGCGTTT	TTGACGTGGG	TCATTAGACT	GGTTCTCCAA	GTAATCACTG	AGTAGCAATT	1440
CATTGAAGGT	TGACGGTGCT	TCAACATAGT	AGGTGACAT	ATGGGCATTG	AAGTAACCTT	1500

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GATGATTGTC	TGAAAAGATG	AATTGACCAG	AATGCCGAT	TTCATGAATC	AAGGTATAGA	1560
CATCGCTCAA	ACGGCCTGTC	CAGCTCATGA	GTACATAAGG	GTGTACGCGA	TATGGTCCG	1620
CCGCATAACC	ACCGGAATCC	TTGCCACTGT	TAGCAGCAA	GTCCACCCAG	CGCTCTCTT	1680
GGTAACGAGC	AACTTCCTGA	CAATATTCTT	GCCCCAAAGG	TTCTACCGAC	TTCATGACCA	1740
AATCATAGGC	ATCGTCAATA	GTCACTTCAG	GATTCAGGGC	GCTGTCCAAG	TCCAATTCC	1800
AGTCTGCAA	GGTCATCTT	TCAAGACCAT	TTACCTTGGC	AACATGCTG	AGGTATCTCT	1860
GAGCGACTGG	TGCAAAGTCC	TTCATGATGA	GGTCAATCTG	GCGGTCAAAC	ATGACACGGT	1920
CCACCTCTTG	TTCAGCTAGA	AGATAGTCAA	AGACAGAGTC	GTATCCCTTC	ATATCAGCCA	1980
AGAGTTTTTC	AGACTTGACC	TGAGCCAGAT	AGGCTGCTGC	AGCCGTATTT	TGGTGCTTAC	2040
GAAGTCCCTC	TGAGAAGGAA	CGGAAGGATT	TCTCACGAAC	CTCAGCATCC	TCATGGTTTT	2100
GGTAGAAATT	CTCATAGGTC	ACAAAGCTGT	TTTGTTAGGT	CTTGCCATGG	GCTTCAAAGT	2160
CAGCCATTTC	AAAATCCCCA	GCTCGCATCT	TAGTATAAAAT	GTCCTGCGGA	CTGTAGAAAA	2220
CTTCACCGAG	ATTTGTCAAG	GCCTTCTCCA	CATCTGCC	TAAGTAGTGG	GCTTTTTGGA	2280
TTTTAGCCTG	ACGAATGGCA	GCTGTTAAAT	GTGGCAATT	ACCCAAACGG	TCCAAGACTT	2340
CCTCATCTGC	TGCCACCAAG	GCATCGTCAA	AGAAGGTCAA	GGCTACGCTG	GCATCTGTTT	2400
CAAATTCCAT	CCCAGCTTGG	GCAATATTGG	CAAATTGTC	ATTGCTATAG	TCCGTCGTCT	2460
GAGGCATAAA	ACCATAGTTG	CCAATATGGC	TCATCTGAAT	GTAGATCTGT	TCCAATTCCG	2520
CAAAGGCCTT	CTCGAAATCC	TCAAAAGCTGT	GAAGATTGCC	CTTGTAAATCA	CGGCTAAACT	2580
GGTTGATGTC	TTCGCGAGCT	TTCTCGATTG	CACGCAAGAA	ATCCTCACGG	TCTGGTATA	2640
GGGCTGTTAA	GTCCCAGAGT	TCCTTCTCTG	GAAATTCTGA	ACGGTGT	TGTTCCATT	2700
TCTTCCTCTT	ATTTCTCTAA	TTCTACTAAA	ACACTAAGGG	CTGATAAACG	GTAAAGCGGT	2760
GCTGTTCTG	CTCGAAATAT	ACGAGGACCT	AGGCCTGCCA	AAACGGCTCC	TTTAGCTTCA	2820
AAACTTTCGA	TTTCTGCAGG	TGAGAGACCG	CCTTCTGGAC	CAAAGATAAA	GAGCAGTTG	2880
GCTCCTGTTT	CAAGACCAGT	GACTGCTTGC	AGAAGCGCAG	CGGCTTCTCC	TTCTTAGCT	2940
GATTCTTCAT	AGGCTACTAT	GATAGAGTCA	AACTGGTCCA	GCTGAGCTAG	AAAATCTGCT	3000
TTTTTCTCGA	AAAGTTTAAT	ACTTGGTACA	ATATTACGCT	TGCTTGC	GGCTGCTCCA	3060
AGGGCAATT	TTTCTAGTTT	TTCAACTTTT	TTACCCAATT	TCTTGCCATC	CCACTTGGCA	3120
ACTGACCAGT	CTGCAGGAAA	GGCCCAGATT	TGGCTAGCCC	CCAGTTCGGT	TACTTTTGGA	3180
GCGATGAACT	CCAGCTTGTGTC	TCCCTGGGA	AATCCAGATG	CGATGGTCAC	TTGGACTGGT	3240

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AGTCCACAT	TGTCATTAA	TTCTGGACC	AACTCAAAC	GACGATTTTC	CATATCCAGC	3300
ACGCGCGCCA	AGCGCTTGAT	GCCATCATCA	AAGACTAAGG	TAACCTCATC	CTCTCTTTC	3360
AAGCGATAAA	CCTGAAACAT	ATGCTTACTG	GTTCCTTGT	CCTCGATAGT	GACAGGAGAG	3420
ATAGCACTGC	CTTTTACAAA	ATACTGCTGC	ATGCTAGCCT	CCAATCACAC	CAGAGATATC	3480
CTTGGTTTTC	TTAAAGACAC	AGGTATTCCA	TTCCCCTTGA	ACCATGTGAG	TTTCGAGGAA	3540
AAATCCAGCT	GAETCAGCCG	ACTGGCGCAC	CATGTCCAAC	TTGTCTTGA	TAATGCCACT	3600
CATGATCAGG	TAGCCTTCAT	CCTTTACCAA	GCGATAAGCA	TCGTCTATTA	GATGAATGAG	3660
GATATCCGCC	AAGATATTAG	CCACAATCAC	ATCTGCCTCA	ATTTCCACAC	CCTTAAGCAA	3720
ATCTCCAGCC	GCTACATGGA	TATTTCCAT	GCCAGGGTTG	AGCTCAATAT	TTTCCTGAGC	3780
CACACGAACC	GCCACATCAT	CCAGGTCATA	GGCGAAAATT	TCTTTAGCCC	CCAGAACGGA	3840
GCTGGCAATA	GAGAGAACCC	CTGAACCACT	CCCCACATCT	AGCACCGTTT	CGCCACCACG	3900
AAGAACCTGT	TCCAAGGCAA	AAAGGCTCAT	CTTGGTAGTT	GGGTGGGTTTC	CAGTACCAAA	3960
AGCCATGCCA	GGATCCAGCT	TGATAATCAT	TTCCCCCGCA	GTCGCTCAT	AGTCTGTCCA	4020
AGAGGGAACG	ATGGTCAAAT	CATGAGTGT	ACGAGCAGGT	TCATAGTATT	TCTTCCAGTT	4080
GTCTGCCAG	TCTTCCTCAG	CCAAGGCAGT	CGTACCTATT	TTTAACTCTC	CCAAATCCAT	4140
AAAATCTGTC	AATTCTGCTA	GACGAGCCTG	CAAATCCGCC	TCAACCACTG	TCACATCCAC	4200
CGTGTCAAGG	TAGTAGGCTG	TCACTACGAT	TTCTTCTTGC	TGCTCCACCT	CTGGGAAAAT	4260
CTCTCCAAAG	CGGTCCACAT	TTCCACATA	GTCCATACTG	TCTTCGATTG	CGACTCCTTG	4320
CGCTCCCAGC	TCAATCAAGA	GATTGGAAAC	CAACTCCTCT	CCCTCACGCT	TCACTGTAAAC	4380
TTTTAACTCT	TGCCATGTTT	CCATTATTAA	TACCAAGCCC	GTAAAACACA	AAACCAAAAT	4440
AGGAAATTCT	CTGAAGACGC	TTGTGTCTAA	GAGAAGTTA	TCTTTTGCG	ACAGTGTAA	4500
GGCGGGTTC	AGTTTAGAAA	TGTAACGTAA	CCATCCTTTC	TAATCACTTA	CTTTAAATA	4560
ATCTTTAAAT	CTCTCTTGCA	ACTGAGGCAC	AACTTGACTG	GAACTAAGAA	ATTCCCTAAC	4620
ATTCACTCAGC	TGATAGCCCT	GTCCTTCATC	TCCGAAGATG	ATATTGTCAA	ATTGTTCTTG	4680
TCTTAGCTGA	CCAACCATAA	AGACCGATTT	CTTGCCTTTA	AAAATTACGC	TAGGATAAAAT	4740
CTTGCTCCAA	AGCAGACAGT	CTTCATCTAA	ATGAATTCCC	AGTTCCCTCAT	AAACTTCACG	4800
CCGAGCGCAT	TCAAAAGGGC	TTTCGCCCCC	TTCACGGCCA	CCACCTGGCA	GTTCCCACAT	4860
ATTGGCCAG	GGAATACTTG	CCTTATCATC	GCGTAAGATA	GTCAAAAGCT	TATCCCCACA	4920
AAACAAAGCA	ATCTTGCAAC	CTGTGAAATC	AGAAATTCT	AGTTCCATCT	TCAGTTCCCTT	4980
CTAACATTTC	CTTTTCCAGC	TCGGCTAAC	AGTTTCATA	ATATCTTTC	TCATCCCTCA	5040

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ACATTCGACT ACTATCCATT TTCTGTCTAG CAATCTGAG AGCCTTACGA GTTCGATCTA	5100
CATCTTTCTT CACCTTTAAT TGATACCAGG CTTGTATCAC TTGAAGATTG GACAGTTGA	5160
GAGACAGAAA CGATTGACC TGTGAAATAC TAGCATATTG CTCCGCTTGC TCAAATCTC	5220
CTTCCAACAA GGCGATATGA AGCAGGGATA GTTGGGCAAC TGTCTGCATC ATCGGAGTAG	5280
TTGTCCCTCTC AAGTAATGCT TGAAACTGCT GTTAGCTAC TTCTTCCTTC CCTTCCAAA	5340
TGGAAACTTC ACCTTGATA CCTAATACAC CATCCGCAAA ACTCCCTCGT GCATCCTCAG	5400
GAAC TGCTTG AACAAAGTCT TTCAAATCAT ATTCTTGAGG AGCTAGCAAG GTCTGGCAG	5460
AATGTCTCAA TAC CAGGAGTAG GCGTATTGAGG TATTTTCAGG GTGTTGTAGT AATTCCAAA	5520
TTTTTGCTCC ATCGGTGATG TCGACTGGCA AAATGTTATT TAGGAAGAAA GATAAATTAA	5580
GAAAAATCCA AGTCCCTGCA AAATACCAGC TTCTTGCAA AAATCCAAAC AATATGCCA	5640
ATAATATCAA GCCGAGATGA ACCATCAAGC CTCTGAAAG CATCAGGATG ATTCTTGAT	5700
CGCTTTCATC CTCTTTAAA CCAATGTATT GAGCACCAAC ATTTTCAGA ATGGCTGTT	5760
TA CTAAGATG AAACCTGCCT GACTTTTGAGG TCAAAATAAA ATGTCCTAAT CCAAAGCCA	5820
CCAGCCGATA GCCTGTCAAG TAGCCACAAA AAGCATGACC CAGCTCATGA AGAATAAAGA	5880
TTAAATACAT GCTTAGAAGA GCGAAGGCAT AACCAAAAGT AAAGGCTAAA ACTGCGGAAT	5940
ACCCCAACTC TGCAAATGCG ATTGTTCCAC AAGCAAAAGC TAGCATAATA AAGACAACAG	6000
CTAGCACATA AACCAAATAA GTCCAATTT TCTTCATAAC ACCTCCAACC AACTCCTAGT	6060
ATCTTGGATA AGGATAAAAT TCTCCCTTTT CCAAGCCAAT TTTTCCTTCT TCAAAGACTT	6120
CTTGGTTCCA TTCCATGACA AATTCTCTG CTTCTGGTC TTCCAAAAG TCCATGAGGA	6180
CATCTAGCCC AACCTCAGCA GTATCTTAA GGAAAAGCGC AAAATAAGCT AAAAATTCAC	6240
GGGAAAATCC TTTTTAGGC AGGTAAGGAA TAACAGTCAA ATAGTCTTCC TCATTGACTG	6300
TTGACTTGGC AGGATTGTAG AAAAGGACCG CTTCTCAGAA AAGAATGTCA TCTGATGAAA	6360
CCTCTCCGTC TTCATCCACC ATCTCCACAC CGCAGCATTG TGCGCTTCCA ATAGAAAAC	6420
CACTTCTACC GCATGGTGC GTTGTCCC GCTAATCTCA AAGTCAAAGG GAAAGTTCTT	6480
GTCCAACCTCT CCCTCTAAAA TATCTAAAAA TCCGTATGTT GCCATTTGT CCTCTTTCTA	6540
TGCGACTCTT TAATCGCCCC GATTGCTCGG AAATATGCTA AAATAGATAC TACCATCTTA	6600
CCACAAAATT ATTTTATGTC CTAATTATAC CATATTACCT CATTAAACC CTTGGTATCA	6660
GTGATTTCT TAAAAGTCTG ATTTCTTCAT TTCTCATAAA AATCAATATA AAAAGCCCTC	6720
GAAAGGGCTA ATAAATCTAT AAAATCAATA GGCGAGTAAC TAGCACAAGT GGACGTGCTT	6780

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TTTTATTGAC TATTACCAACG ATACCAACGCT TAATCTTAGG CTTGAACCTT CTTATCTGCA	6840
ATAGCGTCTG TCAAAGTCTG AGAAAAGTTA AGCCCCATT CTCGTCCCAA CTTATCTGCC	6900
CATTTGGTA TGGTCAAAGT CTTTTAATG GGTCCTGAC TTCCTAGGTA TTCTGATACA	6960
TCAACAGATA CCATAGAAAT AAAAGATTTA TCAAGGTCAT AGGTTGACAC GAAATCTCA	7020
TCATCTTAA AAGGATCATT ATCAATTAAA GACAAGCTAT TGATATCTGA TGGCTGAGGT	7080
AACTCTCCAT CACTCTCTAT CAAATCTGCA ACAGTTATCC CTAGCCACTC CGACCCCATA	7140
GCCAAAGCCT CAGAAATCCC CTCTCCTTGT GTAGCTGAGT ATTCAAAATC TGGGAAATGG	7200
ACAAAATAAG TCGCTTCTGT TCCGCTCTGT TCGTCATAAT AAAATAAAGC TGGATACGTA	7260
ACTAACATTT CACTACCTCC ATATCAAAAA GCAGGGACTG AATTTTACAA CCCAGCTTGC	7320
TTTCTTATCC CTCTTTCAGT GTACTTATTC AGCTCACCAT GAAGGATTGT GATAGGTCTT	7380
TCCCCTTGCT TTTCCATTAA AATATGGGAG CCTTTACCGC CTCTAGTCTT TATCCAACCA	7440
TGGGCCGTAA GGAGTTAAC CATCTCTTT TGTGTCTAG GCATAGCGCT TTTACCTCCT	7500
GACAACACCA TTATAACACG TGTTACACGT ATTGTAAAGG AGTGATACTT ATTATTCTAT	7560
TATACATAAA AGCCCTAGA TGTGGTTCTA AGGGAAACCA ATTTATTCTAT ACCTATTTTT	7620
CTAATGAGTA GTAAAAACTG CTTCTTATC GAGCAATTCA TCATCTGTAT AGTCAATTGT	7680
AAAAGTATCT CGATCTAAGA CAGATTGAGG CGGAGTTGAA TGAATCATAG GAACACTGCG	7740
TACTCTATAT TTTTATCTC CAATTTTAC AAACTGATAC TCTTCGAAAA TCAAATTCAA	7800
ACCACGTCAA CGTCGCCTTA CCGTACTCAA GTACAGCCTG CGGCTAGTTT CCTAGTTGC	7860
TCTTGATTT TCATTGAGTA TGATTAACTC TCAAGTCTTC GAAATCAGGA TTTCAACAG	7920
TTATTACAAG GAGGCGATTT ACTACTCAA AAACATCAAT TATTCTATTT TTCATATTTT	7980
TTCAACCCAT TATTAGAATG AACTCTTGG TAAGCAAAT CAAGTTAGA TTTAATGTTT	8040
TCGTACAAAT CTAAAATCTC TTTGGAGTA TCTTCCCGGA AGAAAAGTTT TCTTTCCCT	8100
GAAATAACTT GATCACTAAG AATCCAATGA CGAATTGTT TTGTAAAAAT CAAAATTCC	8160
TGACTTGGTA GTTCCATCAT TTCCATTGCT TATCACCTCT CTTTCATTA TAGTCATAC	8220
AATGACATTC AGCAATATTA TTTCTCAAGT CAGCACTTCC ACTTCTTTAG GCTCAACTAT	8280
CCTATTTGA GCTTTAAGGA AAATCAAATC TCTCATGCTG ATACCTCTCC TCATTAATT	8340
AAATAGTAAA AAAGATTCTA TCTCACTCCC TGATTATTAC AAAACCATTG AAATATCACA	8400
ACTAATAGGC TAGAATGGAC ATAGTAAGAT ATAGTAGATG AGTCATTCTA CTCAAATCCA	8460
CGTTAGAAAG GACTGCTATG CCAGACAATC TCGCCGTTCG CATGCGCCn GG	8512

(2) INFORMATION FOR SEQ ID NO: 130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2869 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 130:

CTCGTTCAA GGTTGAGTCT CTTGCAAATC TTGTTCGCGT TCTTCCTTTT GCCAAGGCAT	60
CTCTCCCATG GTTGGTGccA GCCATTGTTG GAATCTTGCT CTCATTGGTT CTACCAAACA	120
AGCAAGAAAG CGATGTTTTT GAAATGGAAT AATCACTTAA ATCACTTTG TAGCCAAGTC	180
TACAGGAGTG ATTktCTTTT TTTATCCGAT GATAATGTG TTATAATAGG TAGCGAAAGA	240
GGTGAAGAAA TGAATCAAAC AGTACAATAT ATCAAAGAAC TGACACCCAT TGCGtCGCCA	300
ACAGGCTTTA CTCGTGAGAT TGCGGACTAT TTAGTCAAGA CTCTAGAAGG TTTTGGTTAC	360
CAGCCGGTTC GCACATCAA GGGCGGTGTC AATGTAACCA TTAAAGGTCA AAATGATGAG	420
CAACATCGCT ATGTGACTGC CCATGTAGAT ACGCTTGGTG CTATTGTCG TGCTGTCAAA	480
CCAGACGGCC GTCTCAAAAT GGACCGTATC GGTGGCTTTC CTTGGAACAT GATTGAAGGA	540
GAAAAGTGTAA CCATTCAATGT GGCTAGCACA GGTGAAAAAG TATCAGGAAC CATCCTCATC	600
CACCAAACTT CTTGCCATGT CTATAAGGAT GCAGGAACCTG CAGAACGCAC GCAAGACAAT	660
ATGGAAGTGC GTTTGGACGC CAAAGTAACCT AGTGAAAAAG AAACATCGTGC TCTTGGCATT	720
GAGGTCGGTG ATTTTATCAG TTTTGACCCA CGAACTGTG TGACAGAGAC AGGTTTTATC	780
AAGTCTCGCC ATTTGGATGA CAAGGTCAGT GCGCGATTT TGCTCAATCT CCTTCGCATT	840
TATAAGGAAG AGAAGATTGA ATTGCCCGTA ACAACTCATT TTGCTTTTC AGTCTTGAA	900
GAAGTGGGAC ACGGTGAACTA CTCTAACATT CCTGCTCAGG TAGTAGAATA TCTGGCTGTG	960
GATATGGGAG CCATGGGAGA TGACCAGCAA ACAGACGAAT ATACAGTGTG TATCTGTGTC	1020
AAGGATGCTT CTGGACCTTA TCACTATGAC TTCCGTCAAC ATTTGGTGGC TTTGGCGAAA	1080
GAGCAAGATA TTCCATTAA GCTGGATATC TATCCATTAT ATGGTTCGGA CGCTTCAGCG	1140
GCTATGTCTG CAGGGGCAGA AGTCAAACAC GCCCTTCTCG GTGCTGGTAT AGAGTCTAGC	1200
CATTCCCTATG AGCGTACCCCA TATTGACTCG GTGATCGCAA CAGAACGAAT GGTCGATGCT	1260
TATCTTAAGA GCACGTTGGT GGACTAATAT GTGCCTTATT TGTCAGAGAA TTGACCTCAT	1320
CAAGAAGGAA GAAAATCCTT ACTTTGTCAA AGAGTTGGAA ACAGGCTATC TTGTGGTTGG	1380
AGACCACCAAG TATTTGAAG GCTATAGTCT CTTCTAGCC AAGGAGCATG TCAGCGAATT	1440

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GCACCATTG	AAAAAGGAGA	CAAGACTCCG	TTTTCTAGAA	GAAATGAGTT	TAGTCCAAGA	1500
GGCAGTTGCC	AAGGCCTTG	CTGCTGAGAA	AATGAATATC	GAACTGCTAG	GAAATGGCGA	1560
TGCTCATCTT	CATTGGCATH	TGTTTCCACG	ACGGACAGGT	GATATGAATG	GTCATGGTCT	1620
CAAGGGTCGT	GGACCAGTCT	GGTGGGTTCC	CTTGAGAA	ATGACAGCAG	AAACCTGCCA	1680
AGCAAAACCG	GATGAGATTA	AAAGATTAGT	CAAACGTTA	TCGTCAGAAG	TAGATAAACT	1740
ATTAGAAATA	AAGGAGTAGA	AATGAAGAAA	AGATACCTAG	TCTTGACAGC	TTTGCTAGCC	1800
TTGAGTCTAG	CAGCTTGTTC	ACAAGAAAAA	ACAAAAAATG	AAGATGGAGA	AACTAAGACA	1860
GAACAGACAG	CCAAAGCTGA	TGGAACAGTC	GGTAGTAAGT	CTCAAGGAGC	TGCCAGAGAAG	1920
AAAGCAGAAG	TGGTCAATAA	AGGTGATTAC	TACAGCATTC	AAGGGAAATA	CGATGAAATC	1980
ATCGTAGCCA	ACAAACACTA	TCCATTGTCT	AAAGACTATA	ATCCAGGGGA	AAATCCAACA	2040
GCCAAGGCAG	AGTTGGTCAA	ACTCATAAA	GCGATGCAAG	AGGCAGGTTT	CCCTATTAGT	2100
GATCATTACA	GTGGTTTTAG	AAGTTATGAA	ACTCAGACCA	AGCTCTATCA	AGATTATGTC	2160
AACCAAGATG	GAAAGGCAGC	AGCTGACCGT	TACTCTGCC	GTCCTGGCTA	TAGCGAACAC	2220
CAGACAGGCT	TGGCCTTTGA	TGTGATTGGG	ACTGATGGTG	ATTTGGTGAC	AGAAGAAAAA	2280
GCAGCCCCAAT	GGCTCTGGGA	TCATGCAGCT	GATTATGGCT	TTGTTGTCGG	TTATCTCAAA	2340
GGCAAGGAAA	AGGAAACAGG	CTATATGGCT	GAAGAATGGC	ACCTGCGTTA	TGTAGGAAAA	2400
GAAGCTAAAG	AAATTGCTGC	AAGTGGTCTC	AGTTTGGAAAG	AATACTATGG	CTTTGAAGGC	2460
GGAGACTACG	TCGATTAATA	CTCTTCGAAA	ATCTCTCAA	ACCACGTCAG	CGTCGCCCTTA	2520
CCTACTGACT	GCGTCGGTTC	TATTACAAC	CTCAAAACAG	TGTTTTGAGT	cGATTCGTCA	2580
GTGTTATCTG	CAACCTCAAA	GCTGTACTTT	GAGCAstGCG	GCTAGCTTCC	TAGTTTGCTC	2640
TTTGATTTTC	ATTGAGTACA	AAAAGTAAAC	TTTTCTCTTG	CAATTCCAGA	TAAATAGTGT	2700
ATAATGGATG	GGTATGTGAA	AAACATACTT	GTGGGAGGTA	AAAATCTCTA	ATTACCGCCA	2760
AAACCCACAAA	GGAGGATTTA	AAAATGGCTA	AAAAAGTCGA	AAAACCTGTA	AAATTGCAAA	2820
TCCCTGCTGG	TAAAGCTACA	CCAGCTCCAC	CGGTTGGACC	TGCTCTTGG		2869

(2) INFORMATION FOR SEQ ID NO: 131:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6186 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 131:

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CTGAATCCCT TATAGGAGTC CAGTAACCTT TTAGCCTCTA CTTTGCCCTC ATAGGCAGCT	60
TCAACATCAT TAAAAAAAGA ArGCACTGAA GCAAGTTCTT CAGTGCTCCA CGACAAATCT	120
AGTGGGTAAC TATACTGTTT GTTCATTAAC TAATACCAGC TCTCATTCTT GCTTCTTTA	180
GTTCTTGCTT ACGATAACTA CGAGGGAGAA AAGCACGAAT CTCATCTTCA TTAAAACCGA	240
TTTGCATACG CTTGGCATCA ATAATAATTG GACGACGAA AAGACTAGGA TACTGCTCAA	300
TCAAATGAAG CAATTCCGAT ACCGAAATAC TCTCTACATC AATATTCAAT TTTTGAAAAAA	360
TTTTGAAACG AGTTGAAATG ATGTCATCAG TACCATTTC GGTCAAGGAA AGGATGTGTT	420
GCAATTCTTT TCTTGTAAA GGACTGGTCA TAATATTGTG TTCCACAAAG GGAACCTATG	480
TTTTTCTAAC CAGGCCTTAG CCTTACGACA TGATGTACAG CTCGGTGATA GAAATAGTGT	540
AATCATGCTT TTCTCTTCTT ATCTATACTT TGCTACTTCT ATTATACAAA AAAATAAAC	600
GCTTGACTAG GGATTTTAG AAAAAAGCC TATTTTTCA AGAAAAATAG GCTTTTGCG	660
AACGATTGAC ACAATTGGAT TTGGTTAATT CACTCTTAAC GATGGTTTA AACGATATAT	720
ATTTTTATAT ATGTAAATTA AAAACATCTT TCCTTTCACT TCCTACGACT TTTCAGATAC	780
AGATAGCCAA AGAAGTTTC ATAGAGGGCA AAAAAGAGGA GGAAGGCATG AAGAAAGAAG	840
GTCTCTGGCA AAATCATAAT AACAGGATCC TTGGCTGGAT CAAAAAGCCA GGTATCATCT	900
CCCACAAAGA GAATTTGATC GAAAAGAGTA AAAAATTGCT CAAAACCAAT CAAAACCTCC	960
CCAAGTCCAA TCATCACAGG TAAGACTACT AGAGCCAGGA GACTTTTCG ATAAAGAGAC	1020
AAAAAGTCCT TTTTCACAAT CCTATTGACA AAGACATAGA AACTTGGCAG TGTCACTAGA	1080
GCTACTAGCT GAACCAAATG AAAGAGATTG TTGACCACTG CGAAATGGTG CAGACCAGCT	1140
GCTGACGAAC GAAAATCAGG CATCTGTAAG ACCTGACTAA AAGGATTGGT CAGATAATTG	1200
ATCAAGATAT GAAAATTGTA TTGAATGGTT TCTGGTTTTA GATAGACTCG ATTGTTAAG	1260
TTTAGCCACT GAATCTCCAT AGGATAGAAA ATCCAAGCCA GATAAAATGGT CAGAAGGATG	1320
GAGAGGGAGA GGAGAAAGAG CATAGAGCCC CAAAAGATCA ATTTAGTTT CATCAAAATC	1380
CCACTCCGCA AGGCTAGAAA CCACATGTGT CGGTGCGATT GGCAGGCCAG CTACTTCTTC	1440
TGCCTTAGTA AAACCTGTGTC TCACCAAGAG CGTTGGAATG CCATTGTCAA TCCCAGCCCG	1500
AATATCAGTC AAATAATTGT CCCCAACCAT GATTAACACT TCACGTTCCA AACCTAAGTG	1560
CTCAACCGCC TTGTCCATAA TGATGGCATT TGTTTTCCG ATATAAACCG GCTTCACTCG	1620
TGTCGCTACT TCAAGCAGCG TAATCAGTGA GCCAGCACCT GGCAAAAGAC CGCGTTCCGT	1680
CGGGATGTTG AGGTCAAGGAT TGGTTCCGAT AAAATGGCA CCCTTTGAA TAGCAAGAGT	1740

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TGCTGTGGCA AATTTTCAT AGTCGACTTG CCAATCCAGA CCAACTACCA CGTAGGCAGG	1800
TTTTTCCTTG TCTTCCACAT AACCAGCCGC CTTGATGGCT TCCTTGAGTC CTGCTTCTCC	1860
GACGACATAG ACGGTCTTT CAAGCCCCAA ATCATTACATA TAGTCGATGG TTGCCAAAGT	1920
CGCTGTGTAG ACAGTCGATA GGGCGTATC GATATTAAAA TTCTGAGCCA ACATCTCCTT	1980
AACACTCTCT GGAGTGCAGG TTGTATTGTT GGTTACAAAG AGATAGGGAA TGTCGGCTT	2040
TTGCAATTCA TGAACAAAAG TCTCTCCAGC AGGGATTCCGG TCTTCCCTT TATAATGGT	2100
TCCGTCTAAA TCAATTAAT AGCCTTTATA TTTCATCTAT TTCTCCCTAA GCCTTTTTA	2160
TTTCTTGCCA AGTAATGATT GCTTGGCAT TGATAACCCC ATCACTTGTA ATTCATGCT	2220
TGCTTTCCAG TCCAGTCCGT TCAACAGCCG ATGTAATCAC CCCACCTGGT CGAACCTCCT	2280
TGACATACTT GAGGTTGATT TTCTTGGAA TATAGTGGGT CAAAAAAATCC GCTCCCATGA	2340
CCTCAAAAT CCAGTCCAAG TATTTACTGT TATTGACATG ACCATTACATA TCCAAGTCGT	2400
AAAAACGAAC ATGGTAATCC TTGCTGATCG GTTCTTCCAA GGACTCATAC TTCGGTCCAC	2460
GGATAAGTTT TTATCAAAA TCAGACTGGT AAGGAGCCAC AATCTCAGGT TCAACAAACAT	2520
GGACTTTTCG ACTGTGGCGG TCCATGAGAA CAAAGGTGGC CATCATGTGG ATGAGCTCCT	2580
GCTCCGCTTC ATTATAAAATA GTAAAGCGAC GGTAGAAAA AAGTCGATTG TAGCTCAAGG	2640
CTTCCGTTTC GATGGTAATT TCTTCCGCAA AACGAGGCCA ACGAACCAACC TCAATATCAT	2700
ATTCTACGAT AATCCAGACC AGATTATATT CTTCCAAAAT GGCCTTATCA CTAACCTCCA	2760
GTTCAATCGA CTGCATCCCT GAAACTTGCA GTGACAGCAA AATCACATCT GGAAGTTTGA	2820
TATGACCGTT CATATCAGCC ATATCAAAAG GAATTTTCA TTTCATTTGA TAAGTTAACG	2880
CCATGATCCT ACTCCAAAAT AAATCGTTCT GCTACAGTAT CTCCCAAAAA GAGACCTCTC	2940
TTTGTATGC GAACGTGGTC ACCCTCAATC TGCATGAGGC CTTGTTGAAC CAAATCTCTG	3000
ACAATTTCTC CATAAAGTCC AGCAAAAGAC TGTCAAATT TTTCCCTCAA TCGCGCCATG	3060
GAAACCCCGG ATTTCTTGCG GAGTCCCAAG AACATTTCTT CTTCCATTG CTCCTTTGA	3120
CTCAGGTGAT CTTCTGTAAT ACAAGCATTG CCTTCCCTCAA CCGCACTGAG ATAATGACGA	3180
ATGGGACCAT GATTTTTATA GCGTACTCCA TTGACATAAC CAGATGCCCG TGCACCAATA	3240
CCATAGTATT CAGCATTGTC CCAGTACATG AGATTATGAC GACTTTCAA ACCGGGTTTG	3300
GAGAAATTAG AAATCTCATA ATGCTAAAAA CCCGCTCGCT CCAGCTCTGC AATGATGTAC	3360
TCAAACATCT CCGCTTCTAG TTCCCTCCTTA GGCAGAGGCA ATTTCCCACG TCGCATCCGG	3420
TTCATAAAAGA CCGTATGGTT TTCTAAATC AAACTATACA AACTCATGTG GGGAAATATCC	3480
AATCCAATGG CTTTAGGCCAC ATTTCCCTTT ACTTGCTCCA TGGTCTGACC AGGCAGAGCA	3540

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TAAATCAAAT	CAATGGAGAT	ATTGTCAAAA	CCAGGCCAGTT	TCAGGCGATC	GATATTTCA	3600
TAAATATCCT	TCTCCAAATG	ACTGCGCCA	ATCTTTTCA	ACATCTTATC	ATCAAAGGTC	3660
TGGACACCTA	GCGAAACACG	ATTGACAGCC	GAATTTTCA	AAACAGCTAT	CTTATCCGCA	3720
TCCAATCGC	CTGGATTGGC	TTCAATGGTC	AACTCTTCCA	AGACAGACAA	ATCCAAGTT	3780
TTAGTCAAGC	CATTCAGTAA	CACCTCCAGT	TGCGGAGCCG	ACAGGGCTGT	CGgTGTTCCA	3840
CCACCGATAT	AAAGGGTGA	CAACTTTCA	ATATCATAAG	AACGAAACTC	TTCCAGCAGA	3900
TGCTCTAAAT	AGCTGTCGAC	TGGCTGATTT	TTGATGAAGA	CCTTGAAAA	ATCACAATAA	3960
TAACAAATCT	GGGTACAAAA	TGGGATGTGC	ACATAGGCTG	ACGTTGGTT	TTTCTGCATA	4020
GTAATTATTA	TACCACAAAG	ACTAGATTCC	AGATAAAAAT	CACCATCCCC	AGATACATAG	4080
TCCGTCCGGA	GATGGTGATG	GTTTATTCTT	CTGTTATATC	AATCACAATC	TCTTCTGAGT	4140
CATCAAGAGC	TTCGGCTTT	TCTTGCCATT	GCTCCTTGAG	ATTATTTAAT	TGATTTTTG	4200
ATGCTTCTGT	CGCTTGAAAA	GCATAGGATT	TAGTTGAGC	AACTATACTG	TCCACAGTGA	4260
TTTCACCTGA	CTCAACCTGT	TCTTTGTTT	TCAGAACAAA	ATCTGTAGCC	TGCTCCTTAA	4320
CTTCTGTCAG	TTTTTCACAG	ACTTGCTCCT	TGGCATACTC	CGGATCTTCT	CTCAAATCAT	4380
CTAGAAAATC	TTGAGCCTGA	CTGCAAACCT	GTTCGCCCTT	ATCACTTGTT	AAAAACAAGG	4440
CAAGAGCTGC	ACCTGAAACG	GTTCCTAAAA	GGATTGAGGA	TAATTTACCC	ATAAGGATTG	4500
TCCTTTTTA	TTTTTGAAA	AATTACTTG	CAAGACGAAG	AGCTGACAGA	CTTGCACCAG	4560
TCTTGAGTGT	TTTGAAACCA	GCTGATGAAG	CTTTCTTGCT	CAAGACACGC	GCATGGTCAT	4620
TGAGGTCTGA	AACAGATAGA	GATAATCTG	CAACAGCACT	GAAGAGTGG	TCAATCGTAG	4680
CCACCTTGAC	ATTGATATCA	TCTGCCAAGA	CATTGACCTT	AGCCAACAAAC	TCATTGGTGT	4740
GATGCAAGGT	CACATCCACA	TCTGAAGTCA	AGGTTTAAT	CGTCTTTCT	GTTTCATCGA	4800
TGACACGACC	AAGCTTTGT	ACAGTAATGA	TCAGATAGAC	CAAAAGACA	ATCAAAGCTA	4860
GGGCAACAAG	AATATATGCA	ACTTCTAACCA	TTAGTTTTC	CTCCTCTGTA	ATATAGTAAG	4920
GGGCCTTCTT	TCGATTTGAA	AAAATAACGA	TCATTATACC	GAGACCGATA	AGGACAAC	4980
ACAGCCATTG	GGACACTCGA	AAGCCGAAGA	ACATGAGACT	ATCTGTTCGC	ATACCTTCGA	5040
TAACCATAACG	ACCGAAACCA	TACCAAATCA	AGTAAAAGGC	CGTGATATGA	CCTCGTCTGA	5100
GAATCTTCCA	TTTCCGTCTA	AAAATCAGAA	TCAAGGCAA	GCCAAGCAGA	TTCCATAGAG	5160
ACTCATAAAG	GAAAGTCGGT	TGACGGTAGC	TCCCCTCAAT	ATACATCTGG	TCACGGATAA	5220
AGCCAGGTAG	ATAATCCAGA	TTATCCACTG	TTGCACCATA	AGCTTCTGG	TTAAAGAAAT	5280

900	
TACCCCAACG CCCCAAAC TT TGAGCAATCA TAACGCTAGG CGCCGCAATA TCTAGAAAAT	5340
CCCAAGTATT GATGAGTTA CGGTCAAGCAA AGATATAGAG CACAAGAGCC CCAGTTATCA	5400
AACCACCGTA AATGGCCAAA CCACCATTCC AAATGGCAAA AATCTCTCCT AAATTCTGAC	5460
TATAGTAATC AAATCGGAAA ATAACATAGT AGAGACGAGC TCCTAAAATA GCCAAGGGAA	5520
AGGCTACTAA GATAAAATCT AAAATATCGT CTGGTATGAT CTTCTTCTA GGTGCTTCTT	5580
TCATGGTCAA ATAAACCGCA AGAACATCAAGC CTGTCACAAT ACATAAGGCA TACCAACGAA	5640
TGGCTAGGGG TCCTAGTTGA ATAGCAATTG GATCAAGCAT TTTGCACCTC ATTCGAGCG	5700
ATTAGACTTG TCAGTCGTTG GTCGAACAAA CGGGTCGCAT CAAAGCCCAT TTCCCTGGCA	5760
CGATAATTCA TGGCAGCTGC CTCAATCACA ACAGAGATAT TACGACCTGT TTTAACTGGA	5820
ATACGAATAC GAGGAATGtA CGCCAGAAAC TTCAAGTTCC TCTGCATTAT TTCCAAGACG	5880
ATCAAAGGTC TTATGCGTAT CGTAATTTC CAAATAGACA GCAAGCTGAA CCTGTGAAGA	5940
ATCCTTGACA GCACTCGCAC CGTAGAGACT CATAACATCG ATAATACCAA CCCCACGAAT	6000
TTCAATCAAG TGTTCAAAAA TTTCAGCTGG TTCAACCCAG AGAGTAATCT CATCCTTGGC	6060
AAAGATATCG ACACGGTCAT CGGCTACCAA ACGGTGACCA CGTTTGACAA GCTCAAGACC	6120
TGTCTCGCTC TTACCAATTC CACTATCTCC CTGAATCAAG ACGCCCATCC CATAAATATC	6180
CATCAA	6186

(2) INFORMATION FOR SEQ ID NO: 132:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9541 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 132:

GAAAATCACA ACCCTTTTG CAAAATTTT GAGATTATTT TCACAAAC TT GATTTTCAA	60
AGTATACTCA ATAAAAATTA AAAAATCCA CTACGTCAAG GCGAGGCTAA TGTGGTTTGA	120
AGAAATTTTC GAAGAGCGTG AATGAGTATC ATCTATAGTA AAATAAAAAAA ACTGAACAAT	180
TTGGTTGGGG ACAGCCAAAC CAATTCTCA CAATGTTCA GAAACAAGGG TGTGCTATT	240
CAATTCAGC CTACTATAAC TGTCAAGAT TGCTGAAACA AAGTCTAGGT AAAAGTCTTC	300
ATAATAAAAA GACCTCCTAT CAAGTGTCA AAAACTTTGA TAGGAGGTCT TGTGCTATT	360
AAATATTTAT CAAATTTCT ATACAAGTGA GCTGTTAGCC AGGTTCTTC TATTCTTCA	420
ATTTCAATGA ATGGATTTTT TACTAATCT CATAACTGGG AATTTGTCTG TGTAAAAATA	480

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GCGAGATAGA	TGGTATTAT	AAAACACTCA	AGACAGCTAG	ACTAATATCA	TTTAAACAT	540
TATCTTCTTT	TGAGCGACTG	TTGGTTACCA	ACATAGCTAA	ATTTCCTGCA	TTTCAAATT	600
GATAGGGTTC	TGATTTAGCA	TTCACAAACCA	CCAAGAGGTG	TTCTTGCCG	TGAACTTCAT	660
AGATAAGGTA	GCCGCTATGT	TCAATCGCAG	AATGCACAAA	GACATGATGG	TAAATTCAT	720
CATAGCTAGA	GTAAGAAAAG	GCACCAAGTTT	TTGTCTTCAA	TCGGATGACT	TGACGGATAA	780
ACTCAAACT	GTCTTGACGC	TCATTAATCA	AGTTCCAGTT	CACTTGGTTC	ACACTGTCAG	840
GAGCATTATA	GCTATTCA	GCACGCTCTC	TATCATCATG	GGTCAACTCA	CCATTTTCAC	900
CAGTCGCAAC	CAGTTGGTA	CGACCAAATT	CTTGACCGAT	TTCCATAAAG	GCCATCCCC	960
GCATGAGCAG	ATTCAATGGCT	GTGGCAGTTT	CGACCTTGCG	CATGATTG	TCTGAAC	1020
GGTCTGGATG	AAGGGTTGCC	AATAAAATCGT	GAAGATTGTA	ATTGTCA	TGCTTCA	1080
AGTTAAGCAC	CTGATTGGA	TGTGTATGC	TTCCTAATTC	ACGACTTCT	AGGATTGCTT	1140
TAGCTAGAAT	TGGCTCTGTC	GCAGCACCAC	TGACAAAACC	TGACTTGATA	GCACCAATAA	1200
CTTCTCCCCC	TTTGACAGCA	TCGCGCTGAT	TGTCA	GAAACCAATA	TTTGGCATCT	1260
GGTAGGCATT	GTCCTTCTTG	GCCTTATCAT	AAGGGCAAG	ACCTGTTCCC	ATATCCCAC	1320
CTTCTCCATA	GAGGATAATG	TTGGAGTCGA	TTTCATCCAA	GCTTGACGA	ATCATCTGCA	1380
TGGTCTTGAC	ATCATGAATC	CCCCTCAAGT	CAAAACGGAA	GCCGTCAATA	TTATATTCT	1440
GCACCCAGTA	TAGAAGAGAA	TCAATCATAT	ACTTGCAGAA	CATTCGATG	TCACTGGCTG	1500
TTTCATTCC	AACACCGTT	CCATTCTGGA	AGGTACCATC	TGGATTCTATA	CGATAATAGT	1560
AATCAGGGAC	TGTTGTTGG	AATGGTGCAT	CAACAACTGA	GAAGGTATGG	TTATAGACTA	1620
CATCCATAAT	GACTCCAATA	CCCGCATCGT	GATAAGCTTG	AACCATCACC	TTCAAATCAC	1680
GAATGACCTG	AGCTGGATCA	TCTGGATTAG	TTGAAAAACT	AGTTTCTGGC	GGTTATAGT	1740
TTTGTGGATC	ATAACCCAG	TTGTAGGTTA	CATTCCATC	CTCATCGTAT	TCTTATGAC	1800
GGTCTGCAAT	TGGTTGCAAT	TGAACATAAT	TGTAGCCAG	CTTCTTGATG	TAATCAAAG	1860
CAGTTGACTG	GCCGTATTGG	TTAACTGTT	CAGCCTGAGC	AGCACCCAAG	AAAGTTCC	1920
GAAGATGTTG	ATCTACACCC	GATGTAGGTG	ATTTAGTCAA	ATCACGAATG	TGCATTTCAC	1980
AGATAACTGC	CTTACATGGA	TTTCCAAGC	GCCAAGTAGC	CTCCGAACCG	TGCTTAAAC	2040
CGAAAGTTTC	AACTGCTTT	TCTACATGGC	TCAGAATAGC	TGAACGTTTG	CCATCAGGGC	2100
TGGTCGCGAT	TGTATAAGGA	TCACGTGTCA	GTGTTGGTG	ATGAGGGAAT	TGGACTTGAT	2160
ACTGATAAGT	CTTACCTACC	AAATCTTCTT	CAACATCCAA	ACTCCAGAC	CCGATTGTAT	2220

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TGTCCTTATG	ATTATAAGAG	TAGCTATTGC	CTCTTTCAT	CTCAAAAGTC	TTCCAAACGG	2280
GTGCATCATT	AGCAGCTGAT	TCATAAACGA	CAACTTGCAC	TTCTGTCGCT	GTAGGTGACC	2340
AGAGAGAAAA	ATGAGCCTGA	TTGTCCTCTA	CACGGCAACC	CAATTCTCCT	TGGTAACCCC	2400
AATGATGATC	AAAACTAGCA	CTGTTAATGG	CCTTATCAAA	GGCAAAAGGA	TTTTGATTTT	2460
TATAGAAAGG	ACTGGCAATA	GCAGGGATTT	CAGAGTAATA	AATCCTATCA	TCGCCTTCCA	2520
AAATCCAGAC	CTCTGTTAAT	AGGGGATAGT	GATTAAAACG	GATAGAATAT	TCTTTACTAG	2580
TTTGACCTGT	ATGAACCACA	AAATTCAAGC	TTTCTATAAC	ATGTGAACTT	GGGTGTTCAA	2640
AGCTAAATAA	AGCTCCAAAA	TAATCTTCTT	TGTTAGGTTAG	CAAATCAATT	CGTTGATCCT	2700
GACTTTTAC	AAAGGAGCAA	GTGTCATATT	CTCCATTCTT	ACGATGGTAA	TGAATGCGCA	2760
TAGGGTAGTT	ATACATTTT	TATTTTCCCT	TTTTACTTTG	TTTCTATTTC	ACTAATAAAAT	2820
TTTTGTCAAT	CTCGTCTCAA	TTAACAGACA	TAGTCATATT	CTCTAAACTC	TGTTTTAAA	2880
CGATCCATTA	CAAACTTCT	AGCCATGCCT	CATCTCTGAC	CTGGATACCA	AGTTCTTGTG	2940
CTTTTGCAG	TTTACTTCCA	GCGTCTGCAC	CTACCACGAC	GAGGTCGGTC	TTTTTAGAAA	3000
TACTACCTGT	CACTTTGGCA	CCCAGACTTT	CGAGTTTACT	TTTAGCTCT	GAGCGCTTGA	3060
GTCGTTCCAA	TTTTCTGTC	AATACCACGG	TCAAAACCTGA	CAAGGCCGCA	TCCGCTACTA	3120
CCGTCTGTCC	TTTATAGTCC	AGATTGACCC	CAGTTTCTTT	CAATTCTCTG	AGCAGAAATT	3180
CAGAGCCTTC	TGTCGCAAAA	TAAGTCTGAA	GACTTTGGC	AATCACGCCA	CCTAGACTTT	3240
CAATACTAGC	CACTTCCTCT	GAATCTGCCT	GAGACAGATT	TTCAATTGAA	TGGAAATATT	3300
GAAGTAAAG	CTGACTAAC	TTGCTTCCGA	CATGACGAAT	TCCCAAAACCA	AATAAGAGCT	3360
TCTCGGCAGA	ATTTCCCTT	GATGCTTGGA	TAGCCTGATA	CAGTTTAGCA	GCGGACTTT	3420
CCTTAACTCC	CTCTAAAGG	AGGAAATCCT	CTTCTTGCAA	ACGATAAATA	TCCGCCACAT	3480
CCTTGACTAA	ATTAGCAGCA	AAAAGCTTCT	CAACAATAGA	TGGACCAAGG	CCTGTAATAT	3540
TCATAGCATC	ACGAGAACGCA	AAAGTGAATCA	AGCCTTCCAT	GATTTGAGCA	GGGCAACGCG	3600
GATTGATACA	ACGTAGGGCC	ACTTCATCTT	CAAAGTGCAC	CAAGTCAGAG	TTACAACCTG	3660
GACAGTTTGT	AGGGATATCT	AGTTTTCTT	CAGAAACCCG	TTGGACTCT	ACCACACGTA	3720
AAACGGCAGG	GATGATGTCA	CCAGCCTTAT	ATACAATGAC	CGTATCGTCT	TTTCGGATAT	3780
CTTTTCAGC	AATATAATCT	ACATTGTGCA	GGGTGCGACG	GCTAACAGTC	GTACCGCAA	3840
GTTGTACTGG	TGTTAGATTA	GCAGTTGGAG	TTACAACACC	GGTACGGCCA	ACTGTCCAGT	3900
CAACTGATAA	GAGTTGAGCT	TCTTTTCTT	CGGCAGGGAA	CTTGTAGGCT	ACTGCCACT	3960
TTGGAGCCTT	AACTGTAAAA	CCAAGTTCTT	CTTGACTTG	TAGGTCGTTG	ACCTTGATTA	4020

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CCACTCCATC AATATCGTAA	GGCAGATTTT CCCGTTCTG	TCCTACTTCT	TGGATAAAAT	4080	
TCCAGATTTC ATCTATGTTT	TCAGCCAAGA TTCGCTTAGG	ATTGACCACA	AAACCTAGTT	4140	
GTTCTAGGTA CTTCAAACCC	TTTCTTGGC TATCACGAGT	TGAAGGGCTG	GCTTCTTGAT	4200	
AGAGAAACGT TGCAAGATTA	CGCTTGGCAA CTACTGCTGT	ATCCAATG	CGCAGAGTTC	4260	
CTGCTGCCGC ATTACGAGGA	TTAGCAAATT CAGGCTCTCC	ATTTTCTTGG	CGCGCTTGGT	4320	
TAACTTGGTC AAAGGAAGCG	CGTGGCATGT AACATCCCC	ACGAACATGTG	ATATCTAGTT	4380	
CTTCTGGCAA AGTCAAAGGG	ATGTCCTTAA CACGCTTGAG	GTTTCTGTG	ATATTTCAC	4440	
CAATTGAACC ATCTCACGT	GTTACCCCAG CAACCAAAT	CCCCTTTCA	TAAGTCAGCG	4500	
AGATAGATAA GCCATCGATT	TTCAGCTCAC AAATATAGGT	CGGATGAGCC	ACTTCCTTAC	4560	
GAACACGCCG ATCAAAGCA	TCTAGCTCCT	CACATGAAAA	AGCATCCTGC	AAACTATAAA	4620
GAGGATACTG ATGACTGTAT	TTTCAAAAC CATCTAAAC	CTTGCCACCA	ACACGATGAG	4680	
TCGGACTGTC TGCTAGCACT	TGCTCTGGAT AAGCAGTTTC	TAACTCGACC	AACTCACGGT	4740	
AAAGGCGGTC ATACTCACTG	TCTGAAACCG AGGGATTATC	GCTGGTATAG	TACTCAGTCG	4800	
CATAGCGATT GAGCAAAGCG	ACTAACTCAT TCATTCTTT	ATTCATAAGA	CCATTTCACC	4860	
ATAAAACAAG CCCTCCTCAC	AAACGAGAAG GGCGAAAAAA	ACACTTAGTT	TGAAATTATT	4920	
TTTGAAACTC AAGCAACCTT	ATATCAATTT TCAAAATGA	GTTCGAACAT	ATCCGAGAGC	4980	
TAAGAAATAT AAGGCTACAA	CTCCAAGTCC AATAATCAAG	AAAGAATAAA	GATGGACACT	5040	
TGGCAAGACT GTCATAAAATC	CTTTGCAAT AGGCATAAAAT	AGAATAGCTA	AGGTAAAAAT	5100	
TGTACTCAGT ACTCTTCCAA	GAAATTGCGCT CTCAACCTTG	GTTTGTACTT	GAGTAAAAAA	5160	
GTGAATATTA AAAATCGTCA	AAACAAATTC ACAAACTAAA	TTTCCAGAAA	AGGAAAGAAA	5220	
AGTTGGAAGT GGTAACTCCA	TCATAAAAC TCCGACACCT	GTCAAAGCCA	GTAAATCAA	5280	
AAGATTATAA ATATTAGCTT	TAATTCTACT AGCTAGAAGA	GCCCCAATGA	TGGAACCAAT	5340	
AGCCCCCATA GTTAAATAC	TTGCATAGGC TCCTCTGAC	CCGTAAAGCT	GATTGAAAAA	5400	
GGGAAGTAGA AATTCAAAG	CTGCAAAAAAA GAAATTAAACG	CTGGAAGCTA	CCAGCAAAAG	5460	
GAAGAAAATT TCTTGCTGAT	GCCAGATATA GTGTAACCCA	TCCTTGATAT	CTACAAAAAT	5520	
ATCTCTCCCA GTAAAAGCCT	TTTCTCTTGTG AACTTTGCT	TCCTCTTTG	GAAGGAAAGC	5580	
CACTAGAACAA	AAAGCAATGA AAAAGTCAG	CGAGTCTAGC	AGTAGCGTCA	TATGGAGACT	5640
TGCAAAACTGT AAAACAAGGA	AGGAAAGAAC AGGAGAGCTA	ACACCTACAA	CCTGCAAAAC	5700	
CAGCTCTAAG CGAGAATTAT	AGATCACAAT CTCATCTTC	TCCACCACCT	CAGTTATGAT	5760	

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AGCTTTATTG GCTGTCCGAG AAAAGGCAAA AGCAATAGCC TGCACAATGT TAGCAACAAT	5820
CAAAGCGCCA ATCATCCAGC TATCATTCCCT TATGAAAGAA ATAGCCAGAC AAAGAATCCC	5880
ACAAAACAAGA TCTGCCGTCA TTAAAATCTT ACGACGAGAA AAACGGTCTG AAATAACTCC	5940
GCCAAAGGGA TTGACGAGAA TAGATGTGAC GAGCTCAGAA ATCTGATACA TTCCCTAAAC	6000
TGTCTGTCCT ATAGTCCCCA TAGAAGCCAA CCAGACACTA TTTCCATAAT CATAGAGCAT	6060
ATTTCCCATT TTATTGATAG CCCCACGGCT AATCAACTGC ACTGCATAGC GATTCAATT	6120
AAAGCTCCTC TCAAATTGG AAACATTGT ATCAAAACCG AAAGGAGCTT TTTATTTTTT	6180
CCCTTATTG GGAAAATTAA CTTTGACAA ATTTTCGTA GTGTTCCCTGA TAATAGGCTA	6240
CTTGCTCTGG AAGACCTAAC ACATCAAAA TATGCATGGC CTCTGCATC TGCTTACAGC	6300
CTTCTTTACA CTGTCCTTT TGATATAAGG CAAAACCTTT TAAATAATGG AAAACATTAC	6360
GCTCATAAAG CTTAACACCT TTGTCATAAA TCTTCTCTGT ATAAGCCTCA AAATAGTTGG	6420
CATTATAAAA AGAAGAATGC TCTAAACAAT GCTGGTAACA ATTGAGGGCC AAAATCAACA	6480
CTAATCTCTT ATGGCGACTA ATCTCTTGGT AAAATCCCTC CCTCTCCATA ACTTCTCTAC	6540
CAATCCGAGT GACATAGTCT ACATCGTAGA AACTATAGAG GTTACCGAAA AGAATCAACT	6600
CATACATGGT CCATTCTCT GTTTTGAAGA GATAATCTGC TACCTTACCC AAATCATCCT	6660
GCTTCATATC ATAACTCGCA TCTCTTGAC AAATCAGACC TTGTAGCTAA ATCCAGTTCA	6720
GCTCAAATA AAGGGGAGTC GTCGAACCT TAGACTTTTC AAGTTGTTCT CTTTGAAGCT	6780
TTTGAAAACC TGCAATATCG TTTGAATAGT AAAGTGGGAT AATCTGTGCC ATCATAGACA	6840
CATGTTCATG ATTATGAAAA TTCCCTGCCT TATCCATGAA ATTTTCGATT GTTACATGAA	6900
TGTTATCCAA AATCTCAAAG AAACGGGAGA CTGCCAGGTC AGACTCCCCA AGCTCAAAGC	6960
GAGATAACTG AGAGGTAGAG CAGGATTCGC CTGCTGCTTC CTTTAAAGAA TAATTCAC	7020
TTGTTCGAA TTCACGAAAT ACTTTCCAA GATGTTCCAT CTTTACACCT GCTCTGATAA	7080
TTCTTCCCAC TCAAGCATAG CTTCTCCTG ACGATGGCTG ATTTGTCCA GCTCAGCCTG	7140
TAATTCCATG AGTTTGTGG CATCGTTGT TTCCAACATT TGTTCAAGAAA TGGCTTGGCT	7200
TTGACTTTCT AGCTCTCAA TTTCACTTC TAGACTTTCG ATTTGTGCA TGAGTTGCG	7260
AACTTCTTT TGACTTTCTT TCTGGCCTG ATAGTCATTG ACTGGACTTG CTTCCCTTGC	7320
TTGATTGCTA GTTGAAGCTT CCTCAGTCTG ACTCATTCT GCTGTTGCTT TCTTCTCAAC	7380
ATAGTAGTCG TAATCTCAA GGTAGAGAGT TGAACCATT TCAGACAATT CCAAAACATG	7440
AGTTGCCACA CGATTGATAA AGTAACGATC ATGACTGACA AACAGCAAGG TTCCATCAA	7500
GTCAATCAAG GCATTTCTA GCACTTCCTT ACTATCAATA TCCAAGTGGT TGGTCGGCTC	7560

905

ATCCAGAAC	TC AAAAGTTAT	TGTTTCCAT	AGACAATTTA	GCTAAAAGCA	AACGAGCTTT	7620
TTCGCCACCA	GATAGCATGC	CGACTGATTT	TTAACATCA	TCTCCTGAGA	AAAGGAAGGC	7680
TCCAAGACGG	TTGCGGATTT	CAACTTCTGG	TGTCAGTTG	AAATCATTCC	AGAGTCATC	7740
CAGCACCGTA	TTACTTGGTG	TCAGCTTGCT	TTGGTTTGG	TCATAGTAAC	CAACCTCAAC	7800
ATTAGCGCCA	AAGCGCTTT	CTCCCTTGAT	AAAAGGAATC	TGGTCCACAA	TAGACTTGAT	7860
AAAGGTTGAC	TTGCCGATAC	CATTGGAC	AACGATAGCG	ACAGCATTCA	TCTTACGAAG	7920
ATCTAGGTTA	ATCGGTTGTG	ACAAGACTTC	CCC GTCATAG	CCAACAGCTG	CATTTCAAC	7980
AGTCAAAACA	ACATTGCCCG	ACGTTTTTC	AGACTGGAAG	GTCATGTTGG	CTGATTCTT	8040
GCCAGCTTCA	GGCTTGTCCA	AACGTTCCAT	TTTTTCCAGT	TGTTTACGGC	GAGATTGAGC	8100
ACGTTTAGTC	GTTGAAGCAC	GAACTAGATT	GCGATTGACA	AAGTCTTCCA	GAGCAGCGAT	8160
TTCCTTCTGT	TGCTTTCAT	AGTTTTTGC	CTCAGTA	ACT AGCTTTGCT	CCTTCAATT	8220
GACAAAACGA	GAGTAATTCC	CCACATAGCG	ATCCAAGGAA	TGCTTGGTCA	AATCTAGCGT	8280
AATTGTCGCA	ACCTTGTCCA	AGAAATAACG	GTCGTGGCTG	ACGATAATGA	GGGCACCGCT	8340
ATAGTTTACC	AAGTAATTCT	CTAGCCAGGC	GATGGTTCA	ATATCCAAGT	GGTTAGTTGG	8400
CTCGTCCAAG	ACCAAGAGAT	TGGGTTTTTC	AAGGAGCATT	TTGGCAAGTG	CCAAACGAGT	8460
ATTTTGACCA	CCAGAAAGCT	CAGCAATT	CATCTGCCAC	ATAGACTCGT	CAAACTTGAA	8520
TCCATTCAA	ATCGCTCGAA	TATCAGCTTC	ATAGTAAAG	CCACCTGTT	GGC GAAAATT	8580
CTCAGATAAG	CGGTCTAAAT	CTGACATCAG	TTTATCCAAA	TCCTCACCA	ACTTTCAACC	8640
CATCTCCAGC	TCCATCTGAC	GCAGTTGTCT	CTCCGTCCGA	CGCAAATCAT	TAAAGACATG	8700
AAGCATTCA	TCGTAGATGG	TATTTTCAGA	CTCAAAACGG	CTATCTGGG	CTAGGTAAGA	8760
CAGAGAAATA	TCTTTTTCT	TATTGATTTC	TCCGCTAGTT	GGCTCCTT	CTCCAAC	8820
AATCTTCAA	AGAGTAGACT	TACCTGCACC	ATTTTCCC	ACAAGAGCAA	TCCGATCTCG	8880
TTCATCAACC	TGCAGGGTGA	TATTATCGAA	AAGAACCTCT	CCTGCAAAG	AACGTTCAAT	8940
TTTATTAGCT	TGTAAAATAA	TCATACAA	GTAGTACGAT	GTTTCCCTAA	GGCATTCAAG	9000
ATAATCGTAA	GTCTTTAGT	ACAAC	TTTA	TAACATAAAA	TAACATAAA	9060
TTATATTAGA	TTACTTC	ACT	TTGTTGG	TTTCTAAC	CAGCTAA	9120
AGTTATCGCA	CAAGTCTATT	ATTTAATTCT	TTTCATCATT	TACGTACGTA	TAGCAGATTG	9180
AAATAAGATG	AGAACAAATC	GATTGGAAA	GTAAAATTAA	TTTCTATAAA	TGTTTAGCA	9240
ATTGTTCCGT	ACTATTTAG	ATTCA	GTCTAAC	TATTTCCGA	ACATTCAACT	9300

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TTTTAACTCT ATTTATTACT AGATTCATA ATTAAAAAAC CTACTGACCA AGCTAGAAAG	9360
CTTGATACAA TAGGCTTTT AAAGACTGAT TATTTAACAG CGTCTTAAG AGCTTTACCA	9420
GCTTGAATG CTGGTACTTT AGAAGCTGCA ATTGTCAATT CTTTACCAAGT TTGTGGTTG	9480
CGACCTTAC GTTCTGCGCG CTCACGAAC TCAAAGTTAC CAAAACCGAT CAATTGAAC	9540
T	9541

(2) INFORMATION FOR SEQ ID NO: 133:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 3502 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 133:

TTGACTATCC TATCATGCTT TCTAAGGTCT ACTCAAGAAA ATCATTTCAC	60
CCTTTCTCAA AAAAGTTAAA AAATTTCTC AAAAACGCTT GACTCTGACC TAAGGCGAAG	120
GGTTATACTA TCATTGTAAG GAGGAAATCA TGTACCATAT AAAAGAACGT GCGCAGCTTT	180
CAGGTGTCTC TGTCAAGACC CTGCATCACT ATGACAAGAT AGGACTCTTG GTCCCCTTAA	240
AGTCGGAAA CGGCTATCGA ACCTACAGTC AAGAGGATTG GGAACGCCTT CAGGTCAATT	300
TTTACTACAA ATATCTAGGC TTTCTTTAG AGAAAATAGC AGAGCTGTTA AAGGAAGAAA	360
GGACAGATT ATTGCCCAT TTGACTAGGC AGTTGGACTA TCTAACTCGC GAAAGGCAAC	420
ATCTGGATAC CTTGATTTCC ACCTTGCAAA AAACATTCA AGAACAAAAA GGAGAAAGAA	480
AAATGACCAT TGAGGAAAAA TTCACGGGAT TTAGCTATCA AGACAATCAA AAATACCACC	540
AAGAAGCGGT AGAGAAATAT GGTCAAGAAG TCATGGGACA AGCGCTCGAA CGCCAAAAAG	600
GTCACGAAGA CGAGGCTACG GCCGCCTTA ACCAAGTCTT TCAAACTTG GCACAAAATC	660
TTCAAGTTGG TTTACCTGCA ACAGCAACCG AAAACCAGGA GCAAGCAGCC AAGCTCTTGC	720
AAGCCATTGCA CACTTATGGA TTGACTGCT CTATTGAGGT ATTGGTCAAT ATCGTAAAG	780
GTTACGTCTA CAACCCAGAG TTAAAGGAAA ACATTGACAA GTTGGTTCT GAAACAGCCC	840
AGTACACGTC AGATGCCATT GCGGTTACG TTCAAGACAA TGCAGAATAA ATAGGCTAGG	900
AATTCCTAG CCTATTTTT ACTTCAAATC ATAAAGCCAG TCGTCACCGT TTTGTAGTA	960
AAAGAATTCA CTGAGATCTT CTTCTAGAAA CACACGAAGC ATATCAGACA TATCATCGGT	1020
TGCAAGTTT AGATGAGAAA GATTTTCAAA GTCCTCCAC CAAACTTCC CTTCGTCTGA	1080
AGACTGGAGT TCACCAAGTAA AGTGTCTGT CTTGTAAAAA AGGACGACAT AACGATAATC	1140

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CTTGTGTC	TACCA	GTTTG	GGGT	TTGGAA	ATGA	TCAGAC	CCAGT	1200											
TTCTTCTT	TC	AC	TGACAG	CATC	GACA	AAAGG	AT	CGCCAC	TT	CAACAT	GACC	1260							
ACCAGGAA	AA	GTA	ATGCC	CAG	AC	AGTC	GGG	AT	TA	CTCG	TCTGGAC	GA	GGCTTAT	1320					
TCCGTTT	TA	ATC	CATAC	ACA	TGTT	AAAC	AAA	TTCG	ACTGCC	TCTCTT	CTGT	TCATT	TTCA	1380					
CAACCTT	AA	TCTT	AAAT	CA	TAAT	GCAGAC	TTCCC	GCCAC	CCAG	CCGG	TA	CAGAGG	CAG	1440					
AAGTGA	TGTT	AAAG	CCAC	CC	GTG	GGGC	CAT	TGAT	ATCC	AACT	TGC	CCT	GCAAAG	TGGA	1500				
GGCCAGG	TAC	CAG	CTT	ACTT	TCA	AGGG	TTT	TAGG	ATTG	GAT	TTC	CTTGAGA	CTG	ACTCC	CAC	1560			
CCTGGT	AAAC	AAAG	GACT	TTT	GCA	AGGG	GACA	TTT	TTCC	AGT	TAC	AGGA	ATT	TTAAG	TTCT	1620			
TAATGG	ACTG	GACA	AGGT	GTTG	TCTC	GTT	CC	TT	CAGTC	AG	TTG	TTGACT	TTT	CAGG	AT	1680			
ATCCTT	GTAC	AAAAA	ATT	CG	GCC	AAAG	CG	TT	CTG	TAAC	AA	GG	TTT	TTA	AA	GCG	TTT	CA	1740
AGGA	TTT	TTC	CC	CG	TCT	AGAA	ATG	TAAC	CAAG	TCT	CAGA	AA	AG	TGAGG	CA	1800			
AAAC	ATCG	AG	TGAG	GAGA	ACC	TCCC	CAC	TT	TGAC	AAAG	GCT	AGAC	ATG	CGT	AGGG	CAGC	AG	1860	
GAC	CTG	ACAA	AC	CAA	AGT	GG	GTAA	AGAG	TA	AAT	CATG	GAGT	GAT	GACAT	GC	TTAC	CATA	AC	1920
TTAGGG	TCA	ATCG	TCC	AGA	GAA	ATAC	CTT	GTA	AGG	CTT	TTA	ATG	TGG	AAA	TCT	GTT	AA	TATA	1980
AAGG	ACTT	TC	AGC	AGC	CTCA	AG	ATCG	GTGA	TGG	TATG	C	AA	ATG	GGC	GA	CA	ATCT	CGT	2040
GAC	CAAA	AAAC	CG	ATCG	AA	AGG	GAT	AAG	ACTT	AC	CTG	TG	TG	ACA	ATG	GAG	TT	2100	
TCTC	ACA	AG	TG	AA	GAG	TT	TG	CC	GCT	GACT	TA	AGG	AC	AA	CTG	ATCT	CT	2160	
CAG	AAACG	AT	TCT	ATT	TG	GT	AACT	T	GACC	AC	CTG	TG	TG	TT	CTT	CC	CA	2220	
AAGC	TT	TG	AT	CG	AA	TG	TG	CA	AC	CTG	TT	TT	AA	AA	ATG	GG	CC	2280	
CCTT	AAAG	TT	AA	AC	CC	AT	TT	T	CTG	CA	CT	CT	CT	CT	CT	CT	CC	2340	
AGAA	AAAC	ACT	GTAA	AGAA	AG	TCCG	TT	TG	CAG	ATT	CC	AG	CTA	GG	TT	CTA	AG	2400	
TACC	ATTG	TT	GG	TG	CA	AC	GT	CC	CC	CA	CT	CT	AA	TT	CC	AA	AG	TT	2460
TCCG	ATT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	TT	CC	2520
TCAT	ACCA	GC	GG	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	2580
ACCAC	AAAA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	2640
TAGCC	CATCA	GC	AA	AC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	2700
ATTT	AAAT	AT	CCG	CTT	GT	GG	GA	AGG	TT	TC	GG	AT	TC	GA	AG	AC	AT	AC	2760
TTTC	GTT	AT	TG	GG	CAT	GAC	A	AA	CC	AC	CA	CA	CC	AC	CA	AC	AT	AC	2820
TCAT	CATAG	TG	GCT	GG	AA	AC	TT	TT	GAT	CC	TT	TT	GT	AG	CA	AT	TC	GAGA	2880

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GTCCCAGTTT CACTAGCTTT TCCGACCATA CGAATGTTGA GAAGGCCAAC GACCGTACCG	2940
ATAAGCTTGC TCAAACGGCC GTTCTTCACC AAGTTATCGA CTTTGCTAG GACAAAGAGC	3000
AACTTAGTTT TTTCTTGATA GGCGGTGATA GCTTCAACCA CTTCTTCAAA AGACAAGCCC	3060
TGGTCAATCA AGTCATTCAA TTTTCTACG AGTAGGTCAA CTTCACCACCC AGCAGATAAA	3120
CTATCAATCA CATGAATCTT AGTGTCAAGGA TGGTCTTCCA GATAAAATATT CTTGCTAGT	3180
TGAGCACTAT TGTGACTGCC AGAAAGGGTA CCTGTGATGG TTACTAGGAA AATGTTTTTG	3240
GCACCTTCAA ATGCTCGCAA ATAGTCATCT GGGCTTGGAC AAGCCGATTT TGAAGCTTCT	3300
GCAGTTGCAT ACATGGTTTC CATCATTGG TCAATATCGA GACTGGCGTC ATCAACAAAG	3360
ACCTGATCAG CTACTTGAAT GGTAAAGGGG ACACTTACAA AGGTTGTGTT AATAGCTGGT	3420
GTTGGCAGTT GACGATAATC ACAACCAGAG TCAGCAATAA TCTTCCAAGT CATAGAAATT	3480
CTCCATCTTT GTCAGGAACG AT	3502

(2) INFORMATION FOR SEQ ID NO: 134:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12665 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 134:

CGATTGATT TTTTAAAGCG TTCGATAGAG AATGAGAAC GAATCCTTAG CAATGGCGGG	60
AAAGAATTG GAGTTGAGAA TACAAAACGA TTAACCTATGG CTCATATTGT TTTTTATCTC	120
TCTTGCTTGG TTGAGGCAAT GGTGCACAAG ACAATTTTG ATGGCATGGG CATGGTTGGT	180
TTAGTCTTGC TTATTTTTTC TATGCTGATG TTGATGTTGG TGATTCACTT GTTGGGAGAT	240
ATTTGGACAG TGAAGCTTAT GCTTGTCAAT AATCACAAAT ATGTAGATCA TATCTGTTT	300
AGGACAGTAA AACACCCTAA TTACTTTTA AATATTCTTC CTGAGTTGAT TGGCTTGACC	360
TTGTTGAGTC ATGCTTATGT GACTTTGTT TTAGTTTTTC CAGTTATGC AGTTATTTG	420
TATCGACGAA TAGCTGAAGA GGAAAAGCTA TTACATGAAG TTATAATCCC AAATGGAAGC	480
ATAAAAGAGAT AAATACAAAA TTCGATTTAT ATACAGTTCA TATTGAAGTG ATATAGTAAG	540
GTAAAGAAA AAATATAGAA GGAAATAAAC ATGTTGCAT CAAAAAGCGA AAGAAAAGTA	600
CATTATTCAA TTCGAAATT TAGTGTGGA GTAGCTAGTG TAGTTGTTGC CAGTCTTGT	660
ATGGGAAGTG TGGTTCATGC GACAGAGAAC GAGGGAGCTA CCCAAGTACC CACTTCTTCT	720
AATAGGGCAA ATGAAAGTCA GGCAGAACAA GGAGAACAC CTAAAAAACT CGATTCAAGAA	780

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CGAGATAAGG	CAAGGAAAGA	GGTCGAGGAA	TATGTA	AAAAA	AAATAGTGGG	TGAGAGCTAT	840
GCAAAATCAA	CTAAAAGCG	ACATACAATT	ACTGTAGCTC	TAGTTAACGA	GTTGAACAA	900	
ATTAAGAACG	AGTATTGAA	TAAAATAGTT	GAATCAACCT	CAGAAAGCCA	ACTACAGATA	960	
CTGATGATGG	AGAGTCGATC	AAAAGTAGAT	GAAGCTGTGT	CTAAGTTGA	AAAGGACTCA	1020	
TCTTCTTCGT	CAAGTTCAGA	CTCTTCCACT	AAACCGGAAG	CTTCAGATAC	AGCGAAGCCA	1080	
AACAAGCCG	CAGAACCCAGG	AGAAAAGGTA	GCAGAAGCTA	AGAAGAAGGT	TGAAGAAGCT	1140	
GAGAAAAAAAG	CCAAGGATCA	AAAAGAAGAA	GATCGTCGTA	ACTACCCAAAC	CATTACTTAC	1200	
AAAACGCTTG	AACTTGAAAT	TGCTGAGTCC	GATGTGGAAG	TTAAAAAAAGC	GGAGCTTGAA	1260	
CTAGTAAAAG	TGAAAGCTAA	CGAACCTCGA	GACGAGCAAA	AAATTAAGCA	AGCAGAAGCG	1320	
GAAGTTGAGA	GTAAACAAGC	TGAGGCTACA	AGGTTAAAAA	AAATCAAGAC	AGATCGTGAA	1380	
GAAGCAGAAG	AAGAAGCTAA	ACGAAGAGCA	GATGCTAAAG	AGCAAGTAA	ACCAAAGGGG	1440	
CGGGCAAAAC	GAGGAGTTCC	TGGAGAGCTA	GCAACACCTG	ATAAAAAAAGA	AAATGATGCG	1500	
AAGTCTTCAG	ATTCTAGCGT	AGGTGAAGAA	ACTCTTCCAA	GCCCATCCCT	GAAACCAGAA	1560	
AAAAAGGTAG	CAGAAGCTGA	GAAGAAGGTT	GAAGAAGCTA	AGAAAAAAAGC	CGAGGATCAA	1620	
AAAGAAGAAG	ATCGCCGTAA	CTACCCAACC	AATACTTACA	AAACGTTGA	ACTTGAAATT	1680	
GCTGACTCCG	ATGTGGAAGT	TAAAAAAAGCG	GAGCTTGAAC	TAGTAAAAGA	GGAACGCTAAG	1740	
GAACCTCGAA	ACGAGGAAAA	AGTTAAGCAA	GCAAAAGCGG	AAGTTGAGAG	TAAAAAAAGCT	1800	
GAGGCTACAA	GGTTAGAAAA	AATCAAGACA	GATCGTAAAA	AAGCAGAAGA	AGAACGCTAAA	1860	
CGAAAAGCAG	CAGAAGAAGA	TAAAGTTAAA	GAAAAACCAG	CTGAACAAAC	ACAACCAGCG	1920	
CCGGCTCCAA	AAGCAGAAAA	ACCAGCTCCA	GCTCCAAAAC	CAGAGAATCC	AGCTGAACAA	1980	
CCAAAAGCAG	AAAAACCAGC	TGATCAACAA	GCTGAAGAAG	ACTATGCTCG	TAGATCAGAA	2040	
GAAGAATATA	ATCGCTTGAC	TCAACAGCAA	CCGCCAAAAAA	CTGAAAACC	AGCACAACCA	2100	
TCTACTCCAA	AAACAGGCTG	GAAACAAGAA	AACGGTATGT	GGTACTTCTA	CAATACTGAT	2160	
GGTTCAATGG	CGACAGGATG	GCTCCAAAAC	AATGGCTCAT	GGTACTACCT	CAACAGCAAT	2220	
GGCGCTATGG	CGACAGGATG	GCTCCAAAAC	AATGGTTCAT	GGTACTATCT	AAACGCTAAT	2280	
GGTTCAATGG	CAACAGGATG	GCTCCAAAAC	AATGGTTCAT	GGTACTACCT	AAACGCTAAT	2340	
GGTTCAATGG	CGACAGGATG	GCTCCAATAC	AATGGCTCAT	GGTACTACCT	AAACGCTAAT	2400	
GGTTCAATGG	CGACAGGATG	GCTCCAATAC	AATGGCTCAT	GGTACTACCT	AAACGCTAAT	2460	
GGTGATATGG	CGACAGGTTG	GGTGAAGAGAT	GGAGATAACCT	GGTACTATCT	TGAAGCATA	2520	

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GGTGCTATGA AAGCAAGCCA ATGGTTCAAA GTATCAGATA AATGGTACTA TGTCAATGGC	2580
TCAGGTGCCCT TGCGACTCAA CACAACGTGAT GATGGCTATG GAGTCAATGC CAATGGTGA	2640
TGGGTAAACT AAACCTAATA TAACTAGTTA ATACTGACTT CCTGTAAGAA CTCTTAAAG	2700
TATTCCTAC AAATACCCATA TCCTTTCAGT AGATAATATA CCCTGTAGG AAGTTTAGAT	2760
TAAAAAAATAA CTCTGTAATC TCTAGCCGGA TTTATAGCGC TAGAGACTAC GGAGTTTTT	2820
TGATGAGGAA AGAATGGCGG CATTCAAGAG GCTCTTTAAG AGAGTTACGG GTTTAAACT	2880
ATTAAGCCTT CTCCAATTGC AAGAGGGTTT CAATCTCTGC CAGGGTGCTG GCTTGCAGAA	2940
TGGCTCCACG GAGTTGGCA GCGCCAGATG TTCCACGGAG ATAGTGAGGA GCGAGACCGC	3000
GGAATTCAACG AACTGCGACG TTTTCTCCTT TGAGGTTAAT CAATCGTTTC AAGTGTTCGT	3060
AGGCGATCTT CATCTTGCTC TCAAAGGTCA AATCAGGTAG GATTTCTCCT GTTTCAAAGT	3120
AATGGTTGAT TTGGTTGAAG AGGTAAGGAT TTCCCATGGC AGCTCGGCCA ATCATGACTG	3180
CGTCAGCACC AACTTCTTCG ATGCCTTGCT TGGCTTCTTG GACAGTACGG ATATCACCGT	3240
TGGCGATGAA TGGAACTTG GTTAGAGCTT GGGCAACCTT GTAAAGGGTC TCAAGGTCTG	3300
CGTGGCCAGT ATACATTGAT TCACGGGTAC GGGCATGCAT GGGGAGGGCA GAAACACCTG	3360
CAGCTTCAGC AGCGAGAGCA TTTTCTACTG CAAGAGATGG GTCCGCCAG CCGTACGCA	3420
TTTGACAGT AAGTGGGATA TCAAGGACAG ACTGGACCTT GTTGATGATG GAGTAAATCT	3480
TGTCTGGATC CTTGACCCAC ATAGCACCAG CTTCGTTCTT CACGATTTG TTGACAGGGC	3540
AGCCCATGTT GATATCGACG ATATCGGTCT TGGTGTTC TTGGATGAAT TCTGCTGC	3600
GTGCTAGGCT GTCTTCATCG CTACCAAAAA GTTGGATAGA GACAGGGTTT TCGCCCTCAT	3660
CGATATGAAG CATGTGCAAGG GTTTTTCTG TGTTGTATTG GATTCCCTTG TCAGAGACCA	3720
TTTCCATTAC AACGAGTCCA GCTCCGAGCT CCTTGCGAT AGTACGAAAG GCTGAGTTGG	3780
TCACGCCAGC CATAGGGCCT AAAACGGTAC GATTGGGAAT CTCATATTG CCAATCATAA	3840
AAGGTGTATT AAGATTTGTC ACGAATGAGT TCCTCCAGGT CCTTTTCATC AAAGTTGTAA	3900
GTAGTTGGC AGAATTGACA AGTGATTCTC GCCCCGTGGT CTTCCCTCTT CATTCCCTGT	3960
AAAGTCTGAGC TTGGAAAGGCT GGCAAGAGCG TTCATAAAGC GTTCATGGCT ACAGTCACAT	4020
TGGAAACGGA TTTCTTCTTC AGAAAGACGC TTGTAGGCTT CGTCCCCGTA GATAGCCTTG	4080
AGGAGGGCTT CGATATGGTC GTCGCTTCTG AGAAGAGTAG AGATAGCTGG CATTCTTGG	4140
ATGCCTTTT CAAAGCGAGC AATCTCTCTC TTCTGGCTC CTGGCAAGAC TTGAACTAGG	4200
AAACCACCTG CAACCTTGAC CTTGTCTTCC TCGTCCAAAA GGACATTGAG GCCGACCGCT	4260
GAAGGCCTT GTTGGCTTTC AGTAAGGTAA AAGGCAAGGT CTTCACCGAT TTCTCCAGAG	4320

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ATGAGGGGAG TTATAGAGTT GTAAGGATTT CCAGTACCGT AGTCTGTGAT AACGAGGAAT	4380
TGACCATTTC CAACAAAAGG TCCGACTAGG ACTTCACCAG TCGCAGTCCTT TTTGATGTCA	4440
ACACCAGGAT TTTGAACATA GCCTTGACG TTCCCTTGG TATCAGCGAC GGTGATAATA	4500
GCACCTAGAG AGCTAGATCC CAACACCTTA ACTGTAAGTT TGGTATTCCTT TTTTCATTG	4560
GCTGCGAGAA TCTGGCTAGC GATAAGAGTT CGACCAAGCG CTACAGTTGA GCTAGCTTGG	4620
GTTTGATGTT TTTCTTGAGC AGTGCAGGACG GTTTCAGTGC TATCAAGGAC AAAAGCACGA	4680
AAGGcTCCGC TTTCTGATAT AGTTTAATA ATTTTATCCA TAGCTACTAT TTTAGCATAA	4740
AAATGCCCAA AGGGGGAGCC GTGTGTTTAC TGATTTCAG GATAATGGAC CAGGAAATCA	4800
GCATGAAAAT AAAAAGAGAA ACAGATTATT TTAGCATTG TCAGATTAT GCTATGCTTA	4860
AGGTAGAAAA TGAAAGGGAT AACAAATGTA TTTAGGAGAT TTGATGGAGA AAGCCGAGTG	4920
TGGTCAATTTC TCAATACCTT CCTTCTATT ACAAGAGTCT CAGACGACCG TCAAGGCTGT	4980
AATGGAAGAAA ACAGGATTTT CAAAAGCAAC CCTAACCAAA TATGTCACCC TGCTCAATGA	5040
CAAGGCTTTG GATAGTGGCT TAGAGCTGGC TATTCACTCA GAAGATGAAA ATCTGCGTCT	5100
GTCTATCGGT GCAGCTACCA AGGGGAGAGA TATTGGGAGC TTGTTTTGG AGAGTGCTGT	5160
TAAATACCAAG ATTTTGGTTT ATCTTCTCTA CCACCAACAG TTTTTAGCCC ATCAGCTGGC	5220
TCAAGAATTG GTGATTAGCG AGGCTACGCT TGGTCGTAC TTGGCTGGTT TAAATCAGAT	5280
TTTGTCAAGAA TTTGATTAT CCATCCAAA TGCCCGTTGG CGAGGTCCAG AGCATCAGAT	5340
TCACTATTTC TATTCTGTC TTTCCGAAA GGTCTGGTCG AGTCAGGAAT GGGAAAGGTCA	5400
CATGCAGAAA CCAGAGAGAA AACAGGAGAT TGCCAATTAA GAGGAATCT GCGGTGCAAG	5460
TTTGTCTGCG GGGCAGAAAAT TGGACTTGTT TCTCTGGCT CACATCAGTC ACAACGTCT	5520
TGGGTCAAT GCTTGTCACT TTCAGTCAT AGAAGAGAAA ATGCGAGGGT ATTTGACAA	5580
TATCTTTAT CTTCGTTGC TGAGAAAGGT TCCGTCCTT TTTGCTGGC AACATATTCC	5640
ACTAGGAGTT GAGGATGGTG AGATGATGAT ATTCTTCTCT TTTCTCCTAT CTCATCGCAT	5700
TCTTCCTCTT CATACTATGG AGTATATTCT TGGTTTGGA GGGCAGTTGG CAGATTACT	5760
GACGCAATTG ATTCAAGAAA TGAAGAAGGA GGAACATTG GGGGATTATA CAGAGGACCA	5820
TGTCACCTAT GAACTCAGTC AGCTTGTGC TCAAGTCTAT CTCTATAAGG GCTATATTTC	5880
ACAGGATCGC TACAAGTACC AGTTAGAGAA TCGTCATCCA TATTACTGA TGGAACATGA	5940
TTTTAAAGAG ACAGCAGAGG AGATTTTCA TGCTCTACCT GCTTTCAAC AGGGGACAGA	6000
TTTAGATAAG AAGATTCTCT GGGAAATGGCT CCAGTTAAC GAATATATGG CTGAAAACGG	6060

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TGGCCAGCAT	ATGCCGATTG	GTCTGGATTT	GACATCTGGT	TTTCTTGCT	TTTCAAGGAT	6120
GGCAGCCATT	TTGAAACGGT	ATTTGGAATA	CAATCGTTT	ATTACCATTG	AAGCTTATGA	6180
CCCTAGTCGG	CATTATGATT	TGCTGGTTAC	CAATAACCCG	ATTCATAAGA	AGGAACAGAC	6240
ACCAGTCTAT	TATTTAAAAA	ATGACTTGGA	TATGGAGGAT	TTGGTAGCGA	TTCGCCAGTT	6300
ATTATTCACT	TAAAAGGCTT	GGTTAATCCA	GGTCTTTTT	GTGAAATTCA	CACAATCTCC	6360
TCACATTTTT	TTAAAAATTA	AAAAAAAGTTG	ATAAACAAAGA	AAGCGCTTTA	TTTTGTATAC	6420
TAGTAAGTGT	AAAGAGGAAA	CACCTCAAGA	TCTTTATCAG	GAGGACAGTA	CATGTCACAA	6480
GAAAAATACA	TCATGGCCAT	TGACCAGGGA	ACTACAAGTT	CTCGTGCCAT	CATTTCAAC	6540
AAAAAAGGGG	AAAAGGTAG	CTCGAGTCAA	AAAGAGTTA	CCCATGATT	CCCTCAGGCA	6600
GGTTGGGTTG	AGCACAATGC	CAATGAAATT	TGGAACTCTG	TTCAGTCAGT	TATTGCGGGT	6660
GCTTCATCG	AAAGTGGTGT	CAAGCCAAAT	CAAATCGAGG	CAATCGGGAT	TACCAACCAA	6720
CGTGAAACAA	CGGTTGTCTG	GGATAAGAAA	ACAGGACTTC	CTATCTACAA	TGCTATCGTT	6780
TGGCAGTCAC	GCCAGACAGC	ACCTTTGGCT	GAGCAACTAA	AAAGCCAAGG	TTATGTGGAA	6840
AAATTCCATG	AAAAGACTGG	TTTGATTATT	GATGCTTACT	TCTCTGCTAC	CAAGGTCGTT	6900
TGGATTTGG	ATCATGTAGA	AGGTGCTCAA	GAGCGAGCAG	AAAAAGGGGA	ATTGCTCTTT	6960
GGTACTATCG	ATACTTGGTT	GGTTTGAAA	TTGACTGACG	GTGCGGCTCA	CGTGACTGAC	7020
TACTCAAATG	CAGCTCGTAC	CATGTTTAT	AACATTAAG	AACTCAAATG	GGATGATGAG	7080
ATTTTGGAAA	TCCTTAACAT	TCCGAAGGCT	ATACTTCCAG	AAGTCGTTTC	TAACTCCGAA	7140
ATCTACGGCA	AGACAGCTCC	ATCCATTTC	TACGGTGGAG	AGGTGCCAAT	CTCAGGTATG	7200
GCTGGGGACC	AAACAAGCAGC	CCTCTTGGGA	CAGTTGGCTT	TTGAGGCCAGG	TATGGTTAAG	7260
AATACTTATG	GAACAGGCTC	TTTCATCATC	ATGAATACTG	GGGAAGAGAT	GCAGTTGTCT	7320
GAAAACAACC	TCTTGACAAC	CATTGGTTAC	GGAATCAACG	GTAAGGTTA	TTATGCCTTG	7380
GAAGGTTCTA	TCTTCATCGC	AGGAAGTGCT	ATTCAGTGGC	TTCGTGACGG	TCTTCGCGATG	7440
GTTGAAAATT	CACCAGAACAT	TGAAAAATAC	GCTCGTGATT	CTCACAAACAA	CGATGAAGTT	7500
TATGTCGTT	CAGCCTTTAC	AGGTCTAGGC	GCTCCATACT	GGAACCAAAA	TGCTCGTGGT	7560
TCCGTCTTG	GTGGACTCG	TGGAACAAGC	AAAGAAGACT	TTATCAAGGC	GACTTTGCAA	7620
TCTATTGCTT	ATCAAGTGC	TGATATCATC	GACACCATGC	AAAGTGGATAAC	TCAGACCGCC	7680
ATTCAAGTAC	TGAAGGTGGA	TGGTGGTGCA	GCCATGAACA	ACTTCCTCAT	GCAGTTCCAG	7740
GCGGATATTT	TAGGCATGAA	CATTGACACGT	GCTAAAAACC	TGGAAACAAC	AGCTCTAGGA	7800
CGGGCCTTCC	TAGCAGGTTT	GTCAGTAGGG	TACTGGAAAG	ACTTGGACGA	GTTGAAACTC	7860

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TTGAACGAGA CAGGAGAACT CTTTGAGCCA TCTATGAACG AATCTCGCAA GGAACAACTC	7920
TACAAGGGCT GGAAGAAGGC TGTGAAAGCA ACTCAAGTCT TTGCGGAAGT AGACGACTAA	7980
TACTGGCAGA ATAAAGCGAT TTATTTAGAA AGTGTGTAAA TATGGAATT TCAAAGAAAA	8040
CACGTGAATT GTCAATTAAA AAAATGCAGG AACGTACCCCT GGACCTCTTG ATTATCGGTG	8100
GAGGAATCAC AGGAGCTGGT CTAGCCTTGC AGGCAGCAGC TAGCGGTCTT GAGACTGGTT	8160
TGATTGAAAT GCAAGACTTT GCAGAAGGAA CATCTAGTCG TTCAACAAAA TTGGTTCACG	8220
GAGGAACCTCG TTACCTCAAA CAATTGACG TAGAAGTGGT CTCAGATACG GTTTCTGAAC	8280
GTGCAGTGGT TCAACAAATC GCTCCACACA TTCCAAAATC AGATCCAATG CTCTTACCAAG	8340
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ACGACCTCTT GGCAGGTGTT AGCAACACAC CAGCTGCGAA CAAGGTTTG AGCAAGGATC	8460
AAAGTCTTGGA ACGCCAGCCA AACTTGAAGA AGGAAGGCTT GGTAGGAGGT GGAGTGTATC	8520
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ACGGTGCCTT CATTGCCAAC CACGTGAAGG CAGAAGGCTT CCTCTTGAC GAAAGTGGCA	8640
AGATTACAGG TGTGTAGCT CGTGATCTCT TGACAGACCA AGTGTGGAA ATCAAGGCC	8700
GTCTGGTTAT TAATACAACA GGTCCCTTGGA GTGATAAAAGT ACGTAATTG TCTAATAAGG	8760
GAACGCAATT CTCACAAATG CGCCCAACTA AGGGAGTTCA CTTGGTAGTA GATTCAAGCA	8820
AAATCAAGGT TTCACAGCCA GTTTACTTCG ACACAGGTTT GGGTGACGGT CGTATGGTCT	8880
TTGTTCTCCC ACGTGAAAAC AAGACTTACT TTGGTACAAC TGATACAGAC TACACAGGTG	8940
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ACCGCTTCCC AGAATCCAAC ATCACCATTG ATGATATCGA AAGCAGCTGG GCAGGTCTTC	9060
GTCCATTGAT TGCAGGGAAC AGTGCTCTG ACTATAATGG TGAAATAAC GGTACCATCA	9120
GTGATGAAAG CTTTGACAAC TTGATTGCGA CTGTTGAATC TTATCTCTCC AAAGAAAAAA	9180
CACGTGAAGA TGTGAGTCT GCTGTCAGCA AGCTTGAAAG TAGCACATCT GAGAACATT	9240
TGGATCCATC TGCAGTTCT CGTGGGTCTA GCTTGGACCG TGATGACAAT GGTCTCTGA	9300
CTCTTGCTGG TGGTAAAATC ACAGACTACC GTAAGATGGC TGAAGGAGCT ATGGAGCGCG	9360
TGGTTGACAT CCTCAAAGCA GAATTGACC GTAGCTTTAA ATTGATCAAT TCTAAAACCTT	9420
ACCCCTGTTTC AGGTGGAGAA TTGAACCCAG CAAATGTGGA TTCAGAAATC GAAGCCTTG	9480
CGCAACTTGG AGTATCACGT GGTTGGATA GCAAGGAAGC TCACTATCTG GCAAATCTTT	9540
ACGGTTCAAA TGCACCGAAA GTCTTGCAC TTGCTCACAG CTTGGAACAA GCGCCAGGAC	9600

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TCAGCTTGGC	AGATACTTTG	TCCCTTCACT	ATGCAATGCG	CAATGAGTTG	ACTCTAGCC	9660
CAGTTGACTT	CCTTCTTCGT	CGTACCAATC	ACATGCTCTT	TATGCGTGAT	AGCTTGGATA	9720
GTATCGTTGA	GCCAATTGG	GATGAAATGG	GACGATTCTA	TGACTGGACA	GAAGAAGAAA	9780
AAGCAACTTA	CCGTGCTGAT	GTCGAAGCAG	CTCTCGCTAA	CAACGATTAA	GCAGAATTAA	9840
AAAATTAAGA	AAAAATAAAA	GAGGTGGAGG	GCAGCATTCC	TTGTCGCCCG	TCCCTTCTTT	9900
TTAATGGAGA	CAGAAAGATG	ATGAATGAAT	TATTTGGAGA	ATTTCTAGGG	ACTTTAATCC	9960
TGATTCTTCT	AGGAAATGGT	GTTGTTGCAG	GTGTGGTTCT	TCCTAAAACC	AAGAGCAATA	10020
GCTCAGGTTG	GATTGTGATT	ACTATGGGTT	GGGGGATTGC	AGTTGCGGTT	GCAGTCTTTG	10080
TATCTGGCAA	GCTCAGTCCA	GCTTATTTAA	ACCCAGCTGT	GACCATCGGT	GTGGCCTTAA	10140
AAGGTGGTTT	GCCTTGGGCT	TCCGTTTTGC	CTTATATCTT	AGCCCAGTTC	GCAGGGGCCA	10200
TGCTGGGTCA	GATTTGGTT	TGGTTGCAAT	TCAAACCTCA	CTATGAGGCA	GAAGAAAATG	10260
CAGGCAATAT	CCTGGCAACC	TTCAGTACTG	GACCAGCCAT	CAAGGATACT	GTATCAAAC	10320
TGATTAGCGA	AATCCTTGG	ACTTTGTTT	TGGTGTGAC	AATCTTGCT	TTGGGTCTTT	10380
ACGACTTTCA	GGCAGGTATC	GGAACCTTTG	CAGTGGGAAC	TTTGATTGTC	GGTATCGGTC	10440
TATCACTAGG	TGGGACAACA	GGTTATGCCT	TGAACCCAGC	TCGTGACCTT	GGACCTCGTA	10500
TCATGCACAG	CATCTTGCCA	ATTCCAAACA	AGGGAGACGG	AGACTGGTCT	TACGCTTGGA	10560
TTCCCTGTTGT	AGGCCCTGTT	ATCGGAGCAG	CCTTGGCAGT	GCTTGTATTC	TCACTTTCT	10620
AGTTTATACT	CTTCGAAAAT	CAAATTCAA	CCACGTCAGC	GTCGCCTTAC	CGTACTCAAG	10680
TACAGCTTGC	GGCTAGCTTC	CTAGTTGCT	CTTGATTTT	CATTGAGTAT	TAGAAAACAA	10740
TTATGTTGAT	AGAGCTTGGG	CAAGAGCCA	ATTCAGCAA	AAAATGAAGT	AAATCTTCTC	10800
ATAATAAAAC	GCATCATATC	AAGCACGAAA	ATTCCACGAG	GTCAACTACA	GTCAGAAAGC	10860
TGAACAACAA	GCCAAAACGC	CCAAAAAAGG	CGGAAAAAAG	CAAGCACCTG	CAAGCAACGT	10920
GCCGAAATGG	TCAAATCCTG	ATTATGTCAA	CGAATTAGAC	CCAAAAATCG	TTGATATGCT	10980
AGTAGAATT	CACAAGTCAC	AAGGCACTTT	GGAAACTCCC	GAGGCAGCAAG	CAGAAATCGC	11040
CCAAAAACGT	GAAGAAATCG	AGCAAAGGAG	AGCTGAGCTT	GAGGGTAAAA	ACAAGAGCT	11100
TTTGAACCGC	TTGAACAAAT	AGAGTTCGC	AACTATTATG	CTTACAAATT	ACTTGAGCAA	11160
TTAACTAAAA	TATAAACCT	GCCTTATAT	CTAGGCAGGG	TTTATATTTT	AGAAATTAC	11220
GTAGGTTGTT	ACGGTTTTA	CATACCCAGT	ATAGTTGAG	TTTCTATAGT	ATTCAGTGAT	11280
AAACTTCCAT	TTCTTTGAG	CAACATGGAT	ATAAGTACTT	GTTATGTAGT	ATGGATATGG	11340
GCTTGTGAA	TCCAAGTAAG	ACTGATAAGC	TTGTATACCA	AAATATGCTC	CACCAATTAT	11400

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TGCACCCCAT	GGACCCCCA	ATAAAGCACC	TATCCTACCA	ATCATATAAC	TGATTCCAGC	11460
ACCAGTCATG	AAGTTAGCGA	ATGTGTTAGC	TTGTTTATTC	CCATGTATTG	TGTTGACGTA	11520
ATTCCAAACA	TTAGGATCGT	ATGATCTAAA	AGATATATTT	AGGTCGATTT	CATTCTTTG	11580
ATAAGCCATA	TAAAATGCC	CATTGATATA	GACGCCGTCA	GCACGTCGTT	CAATAGTGTC	11640
TACACTTCCA	TCTGGATTGA	CAACCTCAAG	AACTCATCG	CTTAAAATAT	TTACTTGCCT	11700
ATCTCCGAAAC	CGCACTGATG	AGCCATTCTC	AAACTGAGCC	TCACCAGATA	CAACTTTAGA	11760
GTGTTGCCGAT	AAGCTATCAT	CAGCAAAAC	AAACAAGCGA	CGGGGAAATG	CTAGACATAC	11820
AGAAAACAGA	CATAACTAGC	AAACACATGC	ATTTAAACAT	CTTAGACATA	ACGGAAACTC	11880
CTTTGTATTT	TTGATTTTT	TCAACTTTA	TTATACAATA	AAACCAAATA	AAAAGAAAGC	11940
GGTAACAATA	TGCTTAATGC	GAAAATTTT	TATATATTTT	TATGTTTGAT	CGTTATCGAA	12000
ACTACAGGCT	TGTTGTGTT	GAAAAGAGGT	CTCGAAATGG	GTTATTTAGA	CACAGAAGCT	12060
ATTATCCTCG	CAGTTTTTC	ATTTGCTTTT	TACAACCTAT	GTTCATTGCG	TTGGGTCTGC	12120
TCTACAATAA	AAAACAATAA	AAAATAAATA	GACGTATTTT	CAAAAAAAAC	maAATGCATA	12180
TTTATATTAG	CAAACGACG	ATTTAAATCG	TCGTTTTTTT	GTTAGTACGAC	GGGCATGTCG	12240
TATATCTGAG	GTGTAAGTCC	TCAGCCTGAC	TATCGTGAGG	TAGCAGGGAG	AGGAAGGGAT	12300
AGCGAAATCG	TGGCTCTACG	AACAGGAACG	TGATAGTAAG	GCGTATATAG	CGGATAAGGA	12360
GGCTTCAAAAC	TCTAAAGTCC	AAAAGGTAG	TCGTAACCTA	TATGTTGAAA	TCACGAGAGT	12420
AATTGAATTC	GGACTAAGGT	TTGTGTGAAA	AAGATAAAATC	TTTCTAGAGT	CTAAAGACTC	12480
TGCGTCAGAT	TTCCTATTTT	CACTGTAACC	TTTTAACGTC	CTCATATCTT	GTATAAACGA	12540
GGAAAGATGT	ACGACTTATC	CCGTGAGGTT	TCATGAGCGT	GAAAGCGTAG	TAACAACGAA	12600
TCATGAGAAG	TCAGCCGAGC	CCATAGTAGT	GAGGAAACTT	CCGTAATGGA	AGTGGAGCGA	12660
AGGGG						12665

(2) INFORMATION FOR SEQ ID NO: 135:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 5305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 135:

CGCTAACATCAC TACAATCATT TTATTGACT TTTCACTCT CAAGAAAAGC AAGAAGTATT

60

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CATTTTAGTT	TCATTTAGTA	TTATTTGCA	TACCTAAAAT	ACAGTAAAAA	ATCAGTCATC	120
TTGGTATGCT	CCTGCTTC	CTATTCAACA	CGTTTTGAC	TTATACTAGG	CTCATTCCA	180
AAAGCATTAT	ATAATAGTGA	TATGAAACCA	ACTAAACTAA	ACAAGAAATA	TAAGCAATAA	240
AAATTCTT	AAAAGATCTT	ACTAAAGCTA	ATACTAAATA	AAAATAAAAG	AGTAAACTAG	300
GAAGTTTATT	TCAAACAACC	TAAAATACTG	ATTTCGGCT	GAAGATAATA	CTGGAGTGCA	360
ATTAATGGG	GTTATAATAA	ATAGCTGATA	GCTTGTGTTG	GTGTTGGATT	TTTTAAGAGT	420
AGATGAGTAT	AAAACATATA	AGGAGGACGA	AGGTGGCTAA	AAATTTAAAA	TTAAAATTAG	480
CTCGGGTAGA	GCGTGATT	ACACAAGGTC	AACTGGCAGA	GGCTGTCGGG	GTGACACGCC	540
AGACTATTGG	TTAATAGAG	GCGGGAAAT	ACAATCCCAG	TCTCTCGCTC	TGCCAGTCTA	600
TTTGCAGATG	TTTAGGGAAA	ACCCTAGACC	AACTATTTG	GGAGGAAGAA	GATGAAAAAT	660
AGATTTTATT	ATTCTCAATT	ACTAGACGAA	AGAGAAGAAC	AACTGTTCAA	TAAAGCGGGC	720
TCTGAAAGTT	TCTATATCTG	CATTGCTTG	TCGCTCCTAT	CTTATATCAT	TTCACTATT	780
GCACCAAGCC	TTTTAATTC	TAATATGCTG	CTAATCGTTA	TCATCATAGG	GACATTTC	840
TTTTCAATC	GTGCCCGTTA	TCTGGGAGTG	ACCTACTATG	GTCGTTTCA	TTTACGATT	900
TGGGGTTGTT	TTTCCTAAC	CTTGGCTATT	ACGGCTCTTT	TGATGTTGCA	GAATTATCAA	960
TTCAACATAG	AAATTTATCA	GCACAATCCT	TTGAATTTTA	AATACCTGTC	TGCTGGGTC	1020
ATTACTTATA	TCATTTACCT	TCCGTGGATC	TTTATTGGCA	ATCTTGGCT	TAAGAGCTAT	1080
GGCGAATGGG	CTCAGAAAAA	ATTGAACAA	GATATGGATG	AATTGGAGAG	TGGAGAACAG	1140
CTTGGTTACTC	TTTCTCAAT	CCAGCTAAA	TGTGATATAA	TAGTACTAAT	TTATTGGAAT	1200
ACATGAAAGT	TCTTGAAAAT	TTTCATGGGT	TTCTAGCTAA	GGAAGTAGGA	AAAGTATGTA	1260
TCCAGATGAT	AGTTTGACAT	TGCACACGGA	CTTGTACCAAG	ATCAACATGA	TGCAGGTTA	1320
CTTTGACCAA	GGGATTACACA	ATAAGAAGGC	GGTCTTGAG	GTGTATTCTC	GCCACAGCC	1380
TTTTAAGAAC	GGCTATGCGG	TTTTGCGAGG	TTTAGAAAGA	ATTGTGAACT	ATCTTGAAGA	1440
CTTGCCTTT	TCAGATAGTG	ATATAGCCTA	TTTGGAGTCG	CTTGGTTATC	ATGGGGCGTT	1500
CTTGGATTAC	CTTCGCAATT	TCAAGTTGGA	GTTGACCGTT	CGTTCTGCC	AAGAAGGGGA	1560
TTTGGTTTT	GCTAATGAAC	CGATTGTGCA	GGTGGAAAGGA	CCTCTAGCCC	AATGTCAGTT	1620
GGTCGAAACG	GCTCTTTGA	ACATCGCAA	CTACCAAGACT	TTGGTGGCGA	CGAAGGCAGC	1680
TCGTATTCGT	TCGGTTATCG	AAGATGAACC	CTTGATGGAG	TTTGGGACAC	GTCGGGCTCA	1740
AGAAATGGAT	CGGGCCATCT	GGGAACACCG	CGCAGCTGTG	ATTGGTGGCG	CCAATGGAAC	1800
CAGCAACGTG	CGTGCAGGTA	AGCTCTTGA	CATTCTGTT	TTGGGAACCC	ATGCCCATGC	1860

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CTTGGTACAG	GTTTATGGCA	ATGACTATGA	AGCTTCAAG	GCTTACGCTG	CGACCCACAA	1920
AAATTGTGTC	TTTCTTGTGG	ATACCTATGA	CACCCCTCGC	ATCGGTGTAC	CAGCTGCCAT	1980
TCAGGTGGCG	CGTGAGCTGG	GTGATCAGAT	TAACTTTATG	GGTGTGCGGA	TTGACTCTGG	2040
GGATATTGCC	TACATTTCTA	AGAAAGTCCG	TCAGCAACTG	GATGAGGCTG	GATTTACAGA	2100
GGCTAAGATT	TATGCTTCTA	ATGATCTAGA	TGAAAATACC	ATCCTTAACC	TCAAGATGCA	2160
AAAGGCCAAG	ATTGATGTCT	GGGGTGTGGG	TACCAAGCTG	ATTACAGCCT	ATGACCAGCC	2220
GGCTCTTGGG	CGGGTTTACA	AGATTGTTGC	AATCGAAGAT	GAAACTGGTC	AGATGCGCAA	2280
TACGATTAAG	CTGTCTAATA	ATGCTGAAA	AGTTTCTACG	CCAGGTAAGA	AGCAGGTGTG	2340
GCGCATTACC	AGTCGTGAAA	AAGGCAAGTC	AGAAGGCGAC	TATATCACCT	ATGATGGTGT	2400
GGATATTAGC	GACATGACAG	AAATCAAGAT	GTTCCATCCG	ACCTATACAT	ACATCAAGAA	2460
GACGGTTCGT	AATTTGATG	CCGTTCTCT	CTTGGTGGAT	ATCTTCAAAG	AAGGAATATT	2520
AGTTTACAAC	TTGCCTAGTT	TGACTGACAT	TCAGGATTAT	GCCCCTAAGG	AATTTGACAA	2580
GTTGTGGGAT	GAGTATAAGC	GTGTGCTCAA	TCCGCAGCAC	TATCCAGTGG	ATTTGGCGCG	2640
TGATGTATGG	CAAGATAAGA	TGGACTTGAT	TGATAAGATG	CGCAAGGAAG	CCCTTGGTGA	2700
AGGAGAAAGAA	GAATGAGTTT	GCAAGAAACG	ATTATCCAAG	AGCTGGGTGT	CAAACCAGTG	2760
ATTGATGCC	AGGAAGAAAT	CCGTCGTTCT	ATTGATTTCT	AAAAAAGATA	TCTGAAAAAA	2820
CATCCCTTCC	TAACACCTT	TGTACTAGGG	ATTCTGGGG	GACAAGACTC	AACCTTGGCA	2880
GGACGTTGG	CGCAATTAGC	TATGGAAGAA	CTGCGAGCTG	AAACGGGAGA	CGATAGCTAC	2940
AAATTTATCG	CTGTCCGCC	GCCATACGGA	GTGCAAGCTG	ATGAAGCAGA	TGCTAAAAAA	3000
GCCCTAGCCT	TCATCCAGCC	AGATGTCAGC	TTGGTTGTGA	ATATCAAGGA	ATCAGCTGAT	3060
GCCATGACAG	CTGCAGTTGA	AGCGACAGGT	AGTCCTGTTT	CAGACTTCAA	CAAGGGGAAT	3120
ATCAAGGCAC	GTTGCCGTAT	GATTGCTCAG	TATGCCCTTG	CTGGTCCCA	TAGCGGAGCG	3180
GTCATTGGAA	CAGACCACGC	CGCGAAAAT	ATCACAGGTT	TCTTTACCAA	GTGGTGAC	3240
GGCGGTGCGG	ATATTCTCCC	TCTTTACCGC	CTCAATAAAC	GCCAAGGAAA	ACAGCTTTG	3300
CAGAAACTTG	GCGCAGAGCC	AGCCCTTAT	GAAAAAATCC	CAACGGCAGA	CCTAGAAGAA	3360
GATAAACACAG	GCCTAGCTGA	CGAAGTCGCA	CTTGGAGTCA	CCTACGCAGA	GATTGACGAC	3420
TACCTAGAAG	GCAAAACAAT	CAGCCCAGAA	GCTCAAGCGA	CCATTGAAAA	CTGGTGGCAC	3480
AAAGGCCAAC	ACAAACGCCA	CTTACCCATC	ACCGTATTTG	ATGACTTTG	GGAGTAAAAA	3540
GGTCCGGGGG	ACCTTTTAG	CTTCTTGC	TGAAATTAAA	AAGCAAGAAA	AACCTCCACT	3600

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GGAGGTTTTC AGCCTCTCAT CTTGAAATAA GAAAGTGAGA GAAGGTCTGG GGGATCTTGA	3660
ACCCCGAGTT TAGAAATAAG AAAATGAGGC AGATTCAAGTA ACTCGAAGAG TTCGATTCA	3720
TCGTCTTACC CCTGCAACGA TGACTAGGTT TGAAAAAGCT TGCTAGAGCG CATTCAAAC	3780
CAGGCAGCAA CTGCGTCAAG AAATTAGAAG ACAAACTCGT TTTCTAGCTG TTACTGAGTT	3840
GAGCCTTTT ACTACGAGTA TAGAAATAAG GAAGTGAGGT AGCATCATGA AATCTATCGG	3900
TACGCAAATA TTACAGACAG AACGTTTGAT TTTAAGAAGA TTTGTGGAGA GTGATGCAGA	3960
AGCCATGTTT CAAAATTGGG CTTCATCCGC TGAGAATCTG ACCTATGTTA CCTGGGATCC	4020
CCATCCTGAT GTCGAAATCA CTCGAAACTC GATTTGCAAT TGGGTTGCTT CCTATACTAA	4080
TCTCAACTAT TATAAATGGG CCATTGCT AAAAGAAAAC CCAGAGCAAG TAATAGGAGA	4140
TATCAGCATT GTTAAGATAG ACGAGGCTGA TTTAAGCTGT GAAATTGGCT ATGTGTTAGG	4200
CAAGGCTTAC TGGGAAATG GTATGATGAC AGAGACTTTG AAAGCTATCT TGGACTTTG	4260
TTTTACTCAA GCAGGTTTTC AAAAGGTCAG AGCACGTTAT GCCAGTCTCA ACCCAGCTTC	4320
AGGTCGTGTC ATGGAAAAGG CTGGAATGTC CTATCTACAA ACCATTGTTA ATGGTGTAGA	4380
GAGAAAAGGC TATCTTGCAG ATCTTATTAA TTATGGTATA AGTAGGGAAG AATGTTGAAT	4440
TCTATTTCT GTTTCTATCG AAGTCAACTA TTATGGTAA ATATAATAAT TAGCATTCCA	4500
AGTTTATTTG AAACTTAAA ATAGCATATT GATTAGTACA AGACAGATGT TCTAGTTCC	4560
TCTTTAATCT GGTTTAGTGT TAGTTAAAAA ATCGCTTTAA GCTTGTAAC AAGAGGGAGC	4620
TAATCGACTA GATTCTCCAG CCGAACAGGT GGTAAATGTAC TTTTTATAGT GTAATCCTAG	4680
CTGTTGTTAA ATTTAAAATA GAATCCTCTA TCGAGTTAGG GAATTAAAATT CAACCAATT	4740
TATTCACTGTT TTTTCTATCA AATTATCTAA TATTAAAATA GTCTCATCT GATGAGAAAA	4800
CTATTCCCAA ATCATTCTATA CCTCTCTCAA CTAGATGTAA CTTACAAAAC CCCTGACCTC	4860
ATGAGCCACT TTCTTCCCTC TCATGAGGTC AGTTTTACTT TCTGCTGTC CAGTATCGTT	4920
TTTCCTCGCT AGATTTCCCTC AAAAGGGCAG ACTCCTCCCT TGGTGCCTCA CACGATTTTT	4980
TCATCTCGAC TGTTCTTAA TGCATCATTA ACGACGTTT TCTTCTAGGT GGTCATAAG	5040
GAACAGGAAG ATTCAGGTTG ACTTTCTAA TCCTAGAATA AAGTGCTGAA AACAAATTCGG	5100
AATAGGCATA GAGACTAGAC AATTTGAGGA GCTGCTTGC G TCCTGTTCGA ACACATTTTC	5160
CCACCACGTG AAGAAAAGA TGGCGGAAGC GTTTGATTGT TAAAGTTGG AAGTCACCTC	5220
CAGCTAGATG TTTGAGAAAA AGATAGAGAT TGTAGGCGAT ACAGCTCATC ATCATACGAA	5280
CTTCGTTTT GATTAAGGTT GAACT	5305

(2) INFORMATION FOR SEQ ID NO: 136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3964 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 136:

TGGCAGCTCG TCGTCGAAA GGACGCAAAG	60
TTTGGCTGC ATAATCCAAA CGAATTCTAT	
CAAAAATCAG TAGGAACCTCG AGTCTACTGA	120
TTTTTATTTT TGTAAGAAAG TTCAGTAGAT	
GCAAATGGAT TCGGAAGCGA TGTTACAGTA	180
GATTGAAACT AGAAATAGTAC ACCTCTGTT	
CTAAAACATT GTTAGAAATC GATTGACTG TCCTGATCGA	240
TTTGTCCTGT TATTATTTA	
TTTTACTATA AAGTTGAAGT AGGTTGGAGAT	300
GGTACAGCAA CAATCGTCTT TAAAGATGGT	
TCAGCTATTA CAATTCCAGG AAATCAATTG CTAGCACAAG	360
ATCCAAAAGC ACAAGATAGC	
ACTAAACTGA CTGCTGAAAA ATCAACTGTT AAAGCACCTG	420
CTCAAAGAGT AGATGTAAAA	
GATATAACTC ATTTAACAGA TGAAGAAAAA GTTAAGGTTG	480
CTATTTACA AGCAAATGGT	
TCAGCATTAG ACGGAGCGAC AATCAATGTA GCTGGAGATG	540
GTACAGCAAC AATCACATTC	
CCAGATGGTT CAGTAGTGAC GATTCTAGGA AAAGATACAG	600
TTCAACAAATC TGCGAAAGGT	
GAATCTGTAA CTCAAGAACG TACACCCAGAG TATAAGCTAG	660
AAAATACACC AGGTGGAGAT	
AAGGGAGGCA ATACTGGAAG CTCAGATGCT AATGCGAATG	720
AAGGCGGTGG TAGCCAGGCG	
GGTGGATCAG CTCACACAGG TTCACAAAAC TCAGCTCAAT	780
CACAAGCTTC TAAGCAATT	
GCTACTGAAA AAGAACATCAGC TAAAAATGCC ATTGAAAAAG	840
CAGCCAAGGA CAAGCAGGAT	
GAAATCAAAG GCGCACCGCT TTCTGATAAA GAAAAGCAG	900
AACTTTAGC AAGAGTGGAA	
GCAGAAAAAC AAGCAGCTCT CAAAGAGATT GAAAATGCGA	960
AAACTATGGA AGATGTGAAG	
GAAGCAGAAA CGATTGGAGT GCAAGCCATT GCCATGGTTA	1020
CAGTCCTAA GAGACCAGTG	
GCTCCTAATG CTGCTCCTAA GACAACAAAGT GCACCGCAAG	1080
CAAATGCAGG AACAAATGCAA	
GATGTTACCT ACCAGTCACC TGCTGGCAAA CAATTACCTA	1140
ACACAGGTTA AGCATCAAGT	
GCAGCACTTG CTAGTCTTGG TCTAGTGGTG GCAACAAGTG	1200
GTTCAGCTTT GCTAGGAAGA	
AAGACTAGAC GTAGAAAATA GAACAGCTAG AAAATTCTAT	1260
TCTCTACTTA AAGTTAGATT	
ATAAGGGGGA TTTTGAGAAG TCATCAATCC TAGTGATGGG	1320
TGAGAAAAGT GAGAACCCAA	
GATAATCACA TACTTAGCT GAATAGGAAT ATTCTATCAA	1380
TGTAGCCAAT CTCTCTGTC	
TCTAACTGTG GAATAGGAGA TGGGCAATAT CGGATAGAAA	1440
AGATAGCAGA ATAGCTCTCT	

920

ATTGAAGAGA GGAGGGAAA CCGAAAAATT AGGTGCCCT CCTCTTTTTT GGTATAATAG	1500
AAGATAGAAA ACGAGGTTAG AAGAGATGAT TTTTGATACA CATAACACACT TGAATGTAGA	1560
AGAATTTGCA GGTCGTGAGG CAGAAGAAAT TGCCCTGGCT GCTGAGATGG GTGTGACACA	1620
GATGAATATT GTGGGTTTG ATAAACCGAC GATTGAGCAT GCCTTGGAGT TGGTAGATGA	1680
GTATGAGCAG CTCTATGCGA CTATTGGTTG GCATCCTACA GAAGCTGGTA CTTATACAGA	1740
GGAAGTTGAG GCTTACTTGT TGGATAAGTT AAAACATTCC AAGGTTGTGG CTTTAGGTGA	1800
AATTGGCTTA GATTACCAATT GGATGACAGC GCCCAAAGAG GTGCAGGAGC AGGTTTTTCG	1860
CCGTCAGATT CAGCTATCTA AGGACTTGGA TTTGCCTTT GTTGTCCATA CCCGTGATGC	1920
GCTGGAAGAT ACCTATGAGA TTATCAAGAG TGAGGGCGTT GGTCTCGTG GTGGTATCAT	1980
GCATTCATTT TCAGGGACGC TTGAGTGGC AGAGAAGTTT GTGGATCTTG GTATGACCAT	2040
TTCCTTCTCA GGAGTGGTGA CTTTTAAGAA GGCAACTGAC CTCCAAGAAG CAGCTAAAGA	2100
GTTACCTTG GACAAGATGT TGGTGGAAAC AGATGCGCCT TACTTAGCAC CTGTACCAA	2160
CCGTTGGTCGT GAAAATAAAA CAGCCTATAC TCGCTATGTG GTCGACTTTA TCGCTGACTT	2220
GCGTGGTATG ACGACAGAAG AGCTGGCGGT AGCAACGACT GCAAATGCG AACGAATT	2280
TGGACTGGAC AGCAAGTAAT GAAAGAGAAA ATTCTCAAG TTATCGTGGT TGAAGGGCGT	2340
GATGATACGG TCAATCTCAA ACGTTATTTC GATGTGGAGA CCTATGAGAC TCGAGGTTCT	2400
GCCATCAATG CTCAGGATAT AGAGCGGATT CAGCGCCTGC ACCAACGTCA TGGAGTCATT	2460
GTCTTTACAG ACCCAGATTT TAATGGGGAA CGGATTCCGGC GCATGATCAT GATGGTCATT	2520
CCAACAGTTG ACCATGCCCT TCTCAAGCGA GATGAAGCTG TTCCCAAGTC CAAGACCAAG	2580
GGGCGTTCTC TGGGAATTGA GCATGCCAGC TATGAAGACC TGAAACCGC TCTAGCTCAA	2640
GTGACAGAAC AATTGAAACA TGAGAGTCAG TTTGACATTA GTCGTAGCGA TTTGATTGCG	2700
CTTGGTTTTC TAGCAGGGGC AGACAGCCGT AAGCGTAGAG AATATCTCGG AGAGACTCTC	2760
CGAACCGCT ATTCCAACGG CAAGCAACTC CTCAAACGCC TAGAGTTGTT TGGGGTTACT	2820
TGCGACAAG TGGAAAGAAC TATGAAATCT TATGAGTAGG AAAGATGTAG CCGTTACAAT	2880
TTTTAAAGTT TCACAGTATT TTTCGAAGCA GGTAGAAGAG GAGGCGTCTG ATGTTAATTG	2940
GTCAAAAAAT TAAAGAGATT CGGATAGAAA AAGGAATTAG TCGTCCAGAT TTTGTGGAG	3000
ATGAGCAAGA ACTGACAGTT CGTCAACTGT CGCGAATTGA AAGTGGAGCT TCGCAACCGA	3060
GTGGGCCAA GTTAGACTAT ATTGCTCGCC GGCTAGGAGT TCCAGTTTAT AGCCTTATGC	3120
CGGATTTTC AGCTCTCCCT TCTGCTTATT TAGAATTGAA ATACCAAGATT TTACGTGAAC	3180
CAATCTATGG TAAAGAAGAG GAGTACGATA AGAAGGAAGC GTGTTGGAA GAGATTATA	3240

921

AAACATACTT TGATAATCTT CCTAAAGAAG AACAAATTAGC ATGTGAAGTA TTGCAGCGT	3300
GTTTGGATAC TTCTAGAACT AGAAGGCCTG AATATGCAGA GTTAATACCTT GAGGAACATA	3360
TGCCTCAGAT TATAGAAAAA GAAGCTTATT CAATAAATGA TATGTTGTTG ATTCGTTTGT	3420
TTTTTTATCA AATGCTCATT AGAAAAGATC TTGCCAAATT TATAAATCAA ATCGAAAAGC	3480
TAATGCTCTT TCTTTGGAA CAGAAGAAGG TAACTCAAAT AGAGAATTAC TTTATAATTA	3540
GAGATACTCT TATTCAGGA ATGTGTTGTC TTGAAAAGGT AGGAGTAACT GATTGTTTA	3600
ATGATTATCT ATCGTGTAA CAAGAAATTA TGGATAAAAC TCAAGATTAT CAAAAGAAC	3660
CTCTTGTATT TATGTTTTG TGGAAAGCAAG CATTAAAGAGA AGAAAGAGAT TTTAGTTAG	3720
CTGAATCATT TTATCAGTCT TCTAAACAT TTGCGCAGCT AATTGGAGAT GAATTCTAG	3780
TAAAGAAAATT GACAGAGGAA TGGCAAGAGG ATGTCAAAAA ATATTTATAA ACATAGTGAA	3840
TCAGTGACAA AGATGTCCTT GTCCCTCGTAT CAAAACAGTT CTAAAGTTCG TCTTAGGGA	3900
TGTTTTTTA GATATAAGCT AAAAATGACA CGAAATGGTT AGATTTAAG GACATTGATG	3960
TCCG	3964

(2) INFORMATION FOR SEQ ID NO: 137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 12666 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 137:

TGAGACCGTT ATTTGTATTA GGGAAATGGG TATCTATTTT TAATGCTGTG GGGATTTGA	60
TTGTTTCTAT TATTCAAACC AAAAGCTTGT CAGGTATTGG AGCAGGATTG TTTAATCTAT	120
ATAACATTTTC ATCTTATATA GGTGATTTAG TTAGTTAC TCGATTGATG GCATTAGGAT	180
TATCTGGAGC AAGTATAGCA TCAGCTTCA ATTTAATTGT TGGTTGTTT CCGGAAATAT	240
TGGCTAAACT GACAATTGGA TTAGTATTAT TCATTCTTT ACATGCGATC AATATTTTC	300
TATCGTTACT ATCAGGATAT GTTCATGGAG CACGTCTGAT ATTTGTTGAA TTTTTGGTA	360
AGTTTTATGA GGGTGGAGGA AAACCATTTC AACCTTGAA GGCTTCTGAG AAATATATTA	420
AGGTTATTAC AAAGAATTAA TGGAGGATAT ATATAATGGA ACATTTAGCA ACTTATTTT	480
CAACCTATGG AGGAGCTTTC TTCGCTGCAT TGGGAATTGT ATTGGCGGTT GGATTAAGCG	540
GTATGGGGTC TGCTTATGGA GTTGGTAAGG CTGGGCAATC TGCCGCAGCT TTACTGAAAG	600

922						
AACAGCCTGA	AAAGTTGCC	TCAGCTTGA	TATTGCAATT	ATTGCCCGGA	ACACAAGGAT	660
TATATGGTT	TGTTATTGGA	ATTTTAATT	GGTTGCAATT	AACTCCAGAA	CTTCCTTAG	720
AAAAAGCGT	TGCTTATTTC	TTTGTAGCTC	TTCCAATTGC	TATTGTAGGA	TACTTTCAG	780
CTAAGCATCA	AGGAATGTA	GCAGTAGCGG	GAATGCAAAT	CTTGGCTAAA	AGACCAAAAG	840
AATTCAATGAA	GGGAGCAATT	TTAGCTGCCA	TGGTAGAAC	CTATGCAATT	CTTGCTTTG	900
TCGTATCATT	CATTTGACC	CTTCGTGTAT	AAGAAATAAA	TTTGCAATT	AAAGGAGGTG	960
TCTAAATGAG	CAATTTAGAA	AACTTACGAG	AGTCTGTTAT	TGAACAAGCT	CATGAAAAAG	1020
GGCGTATGAA	ATTATTGGAT	TCCAAAAGA	AGATTGATGA	TGAATTGAA	ATGCAAAAGT	1080
CGCTCATTAT	AAAGAAAAAA	GAAGCTGAAC	ATGAACGAA	GTAAAAGAA	TTGCAACAGA	1140
AATATCAAAT	AATTTTCA	CAATTAAGAA	ATAAGGAACG	CCAATCAACG	TTAGTATCAA	1200
AACAGAAAAT	ATTAAAAGAA	CTTTTCAAT	CTGCTTACT	AGAAATGGAA	TCTGGAGTG	1260
CAGATAAAGA	AATGGAGTTC	ATCTATCGAA	TTCTGGAACG	ATATTCAACAA	CAAGAGGTCA	1320
TAGTAACCTT	TGGGGAACGG	ACTTAGCTA	AATTCAATT	GGAACAATT	GAGAAATTGA	1380
AATTCTCTTT	TCCAAATTAT	TTATTAGTG	AAACACCTAT	CTCAAATGAA	TCAGGCTTAC	1440
TTATTTCAAT	AGGTAAAATT	GATGATAACT	ATTTGTATAA	AACATTAATT	GGATCGATT	1500
CTAAGGAAGA	AAGTTCAAGT	ATCGCAAATC	AAATTTTAT	CAATTAAGGA	TGAAATTGGT	1560
TAATCCTTCT	TAGAAATTG	GAGTATTCCA	ATAAAATTAG	AAAGGTATT	TATGGATACT	1620
AATCTTTTT	CAAAAATAAA	TACGACGATT	TCGGTAAAG	AAAACGATT	TATTACAGAA	1680
GAAAATTT	AAAAAATTAT	ACAATCCAA	GATACGGAGA	CATTGGCATT	TATCTTAGAA	1740
TCAACTCCCT	ATCATTTATC	GATTGACATC	TTAGAAGATC	CTAGTCAGAC	AGAGATT	1800
CTAATGACAA	AATTAGTCAA	TGATTATAGA	TGGCCTATG	CTGAAAGTCC	GTCTGATATA	1860
ATTGTGACTT	TATTTGCTT	ACGATATGTT	TATCATAATA	TCAAAGTTT	ATTAATAC	1920
AAGGCGGCAA	TTAAGAAAGA	TTTTCTAA	TTATTAATTC	CAATAGGGAT	TTTTGATATA	1980
GAAAAGTTAA	AACATTAGT	TTCTCCCTTA	CATTCAGATA	CACTTCCTGA	TTTTATGGTT	2040
CGTGAAGTAG	AATCAATTG	GAATGAGTAT	GAAACTTTA	ATAATATTG	TGTACTTGAT	2100
GTCGGAGCTG	ATCTAGCATA	TTTAAACAT	CTGAAACT	TATCTAATGA	GTAGATGAG	2160
GTACTGTCTC	AGGTTATTG	CGAAATGATT	GACTTTATA	ATATTATTAC	TGTAAAACGT	2220
GGTTTATCTC	AAAATAAGAG	TCATGGGAT	ATTTTACAAT	TACTTCAGA	TGAAGGAAGT	2280
ATTTCTGCTA	AAGAATTAT	ATACATTGTA	GAAGATCAAG	AAATATTGT	GTGGTTCAAT	2340
AAAATAATC	CAAGCTTAGA	TTCAATCTT	TCAACTTATG	AATTGAAGAT	GCAGGACGCA	2400

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ACAATTCAT CTTCTGAGTT AGAATTTTA TGTGATTTAC TATTGTATAA AACTTTAGAT	2460
CAAGGAAGGT ACAATGTAGA GGGGCCGTTA GTTCTTGCTA GATATTTATT GGGATGTGAG	2520
TTTGAAGTAA AGAATCTCG AATGATCATA TCAGCTCTC AAAATACAAT TCCCTTGAA	2580
TCAATAAAAG AAAGGATACG CCCACATTAT GGAAGCTAAT AAGTATAAAA TTGGCATAAT	2640
TGGTAGCCGT GATATTATT TACCATTAG CATGATTGGG TTTGATATAT TTCCTGCCA	2700
CCAAGAACAA GAAGCTATAA ATACACTAAG AAAATTAGCT CAATCTGATT ATGGTGTCA	2760
TTATATCACT GAAGACATTG CTTCAATGAT ATTAGATACA ATTGCCATT ATGATTCCA	2820
AGTTGTGCCT GCTATTATT TATTACCGAC TCATAAACAA GGTTAAATT TAGGATTA	2880
ACGTATAGAG GATAATGTAG AGAAAGCAGT AGGACACAAAT ATTTTATAAT AATGTACAAA	2940
ATTGTCTGTA ATATTATTCT ATAATTTTG GACTTAGTAA GGAGAATAAC TTTGACTCAA	3000
GGGAAGATTAA TAAAAGTATC GGGACCTCTA GTTATTGCAT CAGGTATGCA GGAGGCTAAT	3060
ATTCAAGATA TTTGCCGTGT AGGTAAGCTA GGGTTAACG TGAAATTAT TGAAATGAGA	3120
AGAGATCAGG CATCTATCCA AGTCTATGAA GAAACATCTG GTCTTGGTCC GGGAGAACCT	3180
GTTGTTACAA CTGGAGAACCT TCTCTCGTT GAATTAGGGC CAGGATTGAT TTCTCAAATG	3240
TTTGATGGCA TACAACGCCCTT ATTAGATCGA TTAAATTGGG CTACTCATAA TGATTTCTA	3300
GTTCGTGGGG TAGAAGTTCC AAGTTGGAT AGAGATATTA AGTGGCATT TGATTCCACT	3360
ATAGCAATTG GTCAAAAAGT GAGTACGGGT GATATTCTG GAACTGTCAA GGAAACCGAG	3420
GTAGTTAACATC ATAAAATTAT GGTCCTTAT GGAGTATCTG GAGAAGTCGT TTCTATTGCA	3480
TCTGGCGATT TTACAATTGA TGAAGTTGTA TATGAAATAA AAAAATTGGA CGGTAGTTTC	3540
TATAAAGGAA CGCTTATGCA AAAATGGCCT GTCCGCAAGG CGCGTCCTGT TTCTAACGT	3600
TTAATTCCAG AAGAACCAATT AATCACAGGT CAACGAGTTA TTGATGCATT CTTTCCAGTA	3660
ACCAAAGGGG GAGCTGCAGC AGTTCTGGA CGGTTGGAG CAGGAAAGAC AGTTGTACAA	3720
CACCAAGTAG CTAAATTGCA CAATGTTGAT ATTGTTATT ATGTCGGTTG TGGAGAACGT	3780
GGAAATGAAA TGACGGATGT ACTGAATGAG TTTCTGAGT TGATTGACCC TAATACCGGA	3840
CAATCAATTG TGCAACGGAC AGTTCTGATT GCTAATACCT CAAATATGCC TGTTGCTGCT	3900
CGTGAGGCTT CAATTTATAC AGGAATTACG ATGGCTGAGT ATTTTCGTGA TATGGGCTAC	3960
TCTGTCGCCA TTATGGCTGA TTCAACTTCA CGTTGGCAG AAGCGCTACG TGAAATGTCA	4020
GGACGTCTAG AAGAAATGCC TGGTGATGAG GGTTATCCTG CTTATCTGGG AAGTCGTATC	4080
GCTGAATATT ATGAAAGAGC AGGACGTTCT CAGGTTCTAG GGCTTCCAGA ACGTGAAGGA	4140

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ACGATTACTG CTATTGGAGC TGTATCGCCA CCTGGTGGAG ATATTCAGA ACCAGTTACT	4200
CAAAACACTT TACGGATTGT GAAAGTTTT TGGGGGCTTG ATGCTCCGTT GGCACAGCGA	4260
CGTCATTTTC CTGCAATTAA CTGGCTTACA TCTTATTACAC TATATAAAGA CAGTGTGGC	4320
ACTTTATATAG ATGGTAAAGA GAAGACAGAT TCCAATAGTA AAATAACTCG TGCGATGAAC	4380
TACTTACAAC GGGAACTCTAG TTTAGAGGAA ATTGTTCGTC TTGTTGGAAT TGATTCTCTG	4440
TCTGATAATG AACGACTAAC GATGGAAATT GCTAAACAAA TTGAGAAGA TTATTTGCAA	4500
CAGAACGCTT TTGATTCCGGT AGATACATTC ACTTCGTTG CAAAACAAGA AGCAATGCTA	4560
AGTAATATTC TCACCTTTGC TGATCAGGCA AATCATGCTT TAGAGTTGGG TTCTTACTTT	4620
ACAGAGATTA TGGAAGGTAC CGTGGCAGTT CGAGACCGTA TGGCGAGAAG TAAATATGTT	4680
TCAGAAGATA GATTAGATGA AATCAAAATT ATATCAAATG AGATTACACA TCAAATTCAT	4740
TTGATATTAG AAACAGGAGG TCTATAAATG AGTGTATCAA AAGAATACAG AACTGCTAGT	4800
GAAGTTGTTG GGCCTCTTAT GATTGTTGAA CAAGTAAATA ATGTGTCTTA CAATGAGTTA	4860
GTTGAAATTC AACTTCATAA TGGAGAAATT CGTCGTGGAC AAGTTTTAGA GATCCACGAA	4920
GATAAAGCAA TGGTTCAGCT TTTTGAAGGA TCTAGTGGAA TAAATTTAGA AAAGTCTAAA	4980
ATTCGTTTG CTGGTCATGC ATTAGAATTG GCTGTATCTG AGGATATGGT TGGTCGTATT	5040
TTTAATGGGA TGGGAAAACC AATTGATGGT GGACCAGATT TAATTCCAGA GAAATATTTA	5100
GATATTGATG GTCAAGCTAT TAATCCTGTA TCTAGAGATT ATCCAGATGA ATTATTCAG	5160
ACAGGGATCT CCTCTATTGA TCATTTGAAT ACTCTTGTAC GTGGTCAAAA ATTACCAAGTA	5220
TTTCAGGTT CGGGCTTACC TCATAATGAA TTAGCTGCTC AGATAGCAAG ACAAGCGACT	5280
GTTTTAAATT CTGATGAAAA TTTTGCCTT GTATTTGCAG CAATGGGTAT TACTTTGAA	5340
GAAGCTGAGT TTTTTATGGA AGAACTCAGA AAAACAGGAG CGATCGATCG TTGCGTTTTA	5400
TTTATGAAC TGGCAAATGA TCCTGCAATT GAGCGTATTG CAACTCCCCG CATTGCTTTA	5460
ACTGCAGGCAAG AGTATCTAGC TTTTGAAAAA GATATGCACG TTCTAGTTAT CATGACGGAT	5520
ATGACTAACT ATTGTGAAGC GTTACGTGAA GTCTCGGCAG CTCGCCGTGA AGTTCCAGGG	5580
AGACGAGGCT ATCCGGGATA TTTATATACA AATTATCAA CTCTATACGA AAGGGCTGGT	5640
CGCTTAGTTG GTAAAAAAGG TTGCGTGACA CAGATTCTA TTTTAACAAT GCCAGAAGAT	5700
GACATAACAC ATCCAATTCC TGATTTAAGT GGATACATTA CTGAAGGGCA AATTATTTG	5760
TCGCATGAGT TGTATAATCA AGGTTATCGT CCACCAATCA ATGTTTTACC TTCTCTCTCT	5820
CGATTAAAAG ATAAGGGATC TGGAGAAGGT AAAACTCGTG GAGATCATGC TCCAACATAG	5880
AATCAACTGT TTGCGAGCTA TGCCCAAGGG AAAAAGGTTG AAGAGTTAGC AGTAGTATTA	5940

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GGAGAATCGG	CTTTATCTGA	TGTAGATAAA	TTGTATGTGA	GGTTTACAAA	GCGTTTGAA	6000
GAAGAGTACA	TAAACCAAGG	ATTTTATAAA	AATCGAAATA	TAGAAGATAC	GTTGAATCTT	6060
GGGTGGGAAT	TACTATCAAT	TCTTCCTAGA	ACAGAGTTAA	AACGTATCAA	AGATGATTG	6120
CTTGATAAAAT	ACTTACCTT	GGTAGAAGTT	TAATCCGGAA	ATGGAGTGAT	TATCTATGGT	6180
ACGTTGAAT	GTAAAACCAA	CTCGTATGGA	ATTGAATAAC	TTAAAGGAAC	GTTTGACAAC	6240
AGCTGAACGT	GGACATAAGT	TATTAAAGGA	TAAAAGAGAT	GAATTGATGA	GGCGATTAT	6300
TTCTTGATT	CGTGAGAATA	ATCAACTTCG	GAAAGAAGTG	GAAAGTTATC	TAATTGATAA	6360
TCTAAAATCC	TTTGCAGTTG	CTAAATCATT	AAAGAATTCT	CAAATGGTGG	AGGAATTATT	6420
TTCAATTCCA	TCGAAAGAAA	TTGAATTATT	TGTTGAGAAA	GAAAATATCA	TGAGTGTAAAC	6480
AGTTCCCTAGA	ATGCCATATGA	ATATTACTTC	TCAAAATGAG	AACAGTGAAT	ACAGCTATTT	6540
ATCTTCTAAT	AGTGAATGG	ATGATGTATT	TGCTACAAATG	AATAGTTAA	TTTATAAATT	6600
ACTAAGACTG	GCAGAAGTTG	AAAAAACGTG	TCAGTTAATG	GCTGATGAAA	TAGAAAAAAC	6660
ACGTAGACGT	GTAAATGGTT	TAGAATACTC	GATTATTCCA	AACTTGTGG	AAACTATTCA	6720
TTATATAGAA	TTGAAACTAG	AGGAGGCAGA	AAGAGCCAAT	TTAGTTCGTA	TTATGAAAGT	6780
GAAGTAGATC	CTTTATTTAG	ATTATTAATT	AGATGAACAA	ATATCAGCTT	GGATAAGGCT	6840
TTAACGCCTT	CTAACGCTTT	TTTATTGACA	GTATCAGGAT	ATCTTTTCA	AAATTTGGT	6900
TTGTTAGATA	ATGAAAATGT	TTCTACTAAT	CTAGATTTAG	GATTAGTAAA	TCGTAAATGT	6960
AATTATATAG	AAAGTAAGCG	CGTCATAACA	AGGTATCTAT	CATTCAATGGA	GCTCCTCCTG	7020
TATACTATTA	GTAAAAGTAA	ACTATTGGAG	GATATTTAA	TGCCACAAACC	TATTGTCCT	7080
GTAGAGATTC	CACAATCTCG	TCGTTTGAT	TCTAAAAGA	GAAATGATAT	TCTGCTTAAA	7140
ATTCGTATTG	GCAAGCTTGA	AGTAAGTTTT	TTCAATCTC	TCAATCTCGA	AATGGTAGAA	7200
CAGCTTTGG	ATAAGGTGTT	GCTCTATGAC	AATTCATCTA	TCTAGCCTAG	GGGAGGTCTA	7260
TCTCGTGTGT	GGGAAAATG	ATATGAGACA	AGGAATCGAT	TCACTGGCTT	ATCTGGTTAA	7320
AACCCACTTT	GAATTGGATC	CTTTCTCCGG	TCAAGTCTTT	CTCTTTGTG	GTGGACGTAA	7380
AGACCGCTTT	AAAGTCCTT	ACTGGGATGG	TCAAGGATTT	TGGCTACTAT	ATAAACGCTT	7440
TGAGAACGGC	AGATTGATTT	GGCTAAGTAC	AGAAAAGGGAT	GTCAAAGCTC	TCACACCAGA	7500
ACAAGTAGAC	TGGCTTATGA	AGGGCTTTC	TATCACTCCA	AAAATATAGT	AGATTGAAAC	7560
TAGAATAGTA	CACCTCTGCT	TCTAAAACAT	TGTTAGAAAT	CGATTTACT	GTCCTGATCG	7620
ATTTGTCCTG	TTCTTATTTTC	ATTTACTAT	AAATCCATCA	GAAAGTCGTG	ATTTCTATTG	7680

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AAATGAGGAC TTTCTTTTA TACTCATCTG CTTCAAAAA GCATTCTAGT CCATCTCCGA	7740
TTAACGATGG ACTTTATCAC CTCCTCTCC AGTCCTTGTa TAACATCTTG GAGTTGATTc	7800
ATGACATCTT CCAAAGTTA AAAGGTTTA TTCTTAAATC CACGTTACG AATCTCTTC	7860
CACACTTGTt CAATGGGTT CATCTCTGGT GTGTATGGAG GAATAAATGC AAAGCCAATA	7920
TTAGTCGGAA TCTTTAAGGT ACTTGATTa TGCCATATAG CATTGTCCAT AACGAGTAAA	7980
AGATAATCAT CTGGATAAGC TTGTGAAATC TCCTATTCCt AAAGCCCTT TAGCGCATAA	8040
CTTTGGCTCA GCTTCTATTA TCGCTCACAC CATCCATCAG AAGTTAATC TGAAGGTACC	8100
CAATTATCGC CAAGAAGAAG ATTGGGCTAG GATGGGTTA CCAATCACAC GTAAGGAAAT	8160
CTCTAATTGG CATATCAAGG CGAGTCAATA CTATTTGGAG CCCCTTTATA ACCTCTTGCG	8220
AGAGAGACTA TTGACTCAGC CCTTACTTCA TGCGGATGAA ACTTCTTATA GGGTGTAGA	8280
GAGTGATAGT CAGCTGACTT ACTATTGGAC TTTTTGTCA GGTAAAGCAG AGAAACAAGG	8340
GATTACGCTT TACCACCATG ATCAGTGTG AAGTGGTCA GTAGTACAAG AATTCTAGG	8400
AGATTATTCT GGCTATGTGC ATTGTGATAT TTTGCGGCAG TAACTTAGGA CTTTAGTCCT	8460
CTAGTTCTGC CTATGCGATA GCAGTCCAAG GTTTAGGAGC AAGGCGACGC TAAGCTTGGT	8520
AAACTTCGAA CCGCTCGTCT GCTTATCGTC AACTGGAAGA AGCTGAACt GTGGATGTT	8580
GGGCGCATGT GAGAAGGAAG TTTTTGAAG CGCCCCCCCAG AGCAAGCGGA TAAATCATCC	8640
TTAGGAGCTA AAGGTTAGC TTATTGTGAT CAGTTATTTT CTTGGAAAG AGACTGGGAG	8700
GCTTTGCCAG CTGATGAACG ACTACAGAA CGTCAAGAAC ATCTCCAGCC CTTAATGGAA	8760
GACTTCTTG CTTAGTGCCG GCGTCAGTCA GTTTAGCAG GTTCAAAACT AGGAAGGGCA	8820
ATTGAATACA GCCTCAAGTA TGAAGAAACC TTTAAGACCA TTTTGAAAGA CGGACATCTG	8880
GTCCTTTCCA ATAATCTAGC TGAACGCGCC ATTAATCAT TGGTTATGGG ACGGAGTAAA	8940
AGAGTCCAGT GGACTCTTT AGCCTAAGCT CAGTTAAAAA AAGCGAGGGT GGTTATTTTC	9000
TCAAAGTTT GAAGGAGCTA AAGCAAGAGC TATTATTATG AGTTTGTGG AAACAGCTAA	9060
ACGTCATCAA TTAAATAGCG AGAAATATCT ATCCTATCTT CTAGAATGTC TTCAAACGA	9120
GGAAACTCTC GTAAACAAAG AGGTTTTAGA GGCTTATTTA CCATGGACTA AAGTTGTACA	9180
AGAAAAGTGC AAATAAGAAA TCTCCAGATT AGGAACATATC CGTGAGTTCT CCAGTCTGGA	9240
GATTTTCAA TAGACTCCT GCGAAACAAA ATATGGTATA ATAGTTCTAT GAATGATGAA	9300
GCAAGTAAAC AACTAACCGA TGCACGATTT AAGCGTCTTG TTGGTGTCA ACGCACCGACT	9360
TTTGAAGAGA TGTTAGCTGT ATTAAAAACCA GCTTATCAAC TTAAACACGC AAAAGGTGGA	9420
CGAAAACCTA AATTAAGTCT AGAAGACCTT CTTATGGCCA CTCTTCAATA TGTGCGAGAA	9480

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TATCGAACTT	ATGAACAAAT	TGCGGCTGTT	TTTGGTATTC	ACGAAAGCAA	CTTAATCCGT	9540
CGGAGCCAAT	GGGTTGAAGT	AACTCTGTT	CAAAGTGGTG	TTACGATTTC	AAGAACTCCT	9600
CTCAGTTCTG	AGGACACGGT	AATGATTGAT	GCGACGGAAG	AAAAATCAA	TGCCCCTAAA	9660
AAAAGAATT	GCAGAATTATT	CTGGTAAAAA	GAAATTCAC	GCTATGAAGG	CTCAAGCGAT	9720
TGTCACAAGT	CAAGGGAGAA	TTGTTTCTTT	GGATATCACT	GTGAACTATT	GTCATGATAT	9780
GAAAGTTGTT	AAAATGAGTC	GCAGAAATAT	CAGACAAGCT	GGTAAAATCT	TGGCTGACAG	9840
TGGTTATCAA	GGGCTCATGA	AGATATATCC	TCAAGCACAA	ACTTCACGTA	AATCCAGCAA	9900
ACTCAAACCG	CTAACAAATTG	AAGATAAAAGT	CTATAACCAT	GCGCTATCTA	AGGAGAGAAG	9960
CAAGGTTGAG	AACATCTTG	CCAAAGTAAA	AACGTTAAA	ATGATTCAA	CAACCTATCG	10020
AAATCATCTA	AACGCTTCGG	ATTACGAATG	AATTGATTG	CTGGTATTAT	CAATCATGAA	10080
CTAGGATTCT	ACTTTGCGAG	GAAGTCTATT	ATCAAAAATA	CCATCAAGAT	TATATAAGAT	10140
TGATACAGGA	AAAGTTTAT	TTGATGGTGT	AAATATTAAT	CAAATAGATA	AAAAAATATT	10200
AAAGTCAAAAT	TTAGGAGTAG	TTCCACAGGA	TTCATTTTA	TTGAACCGAA	GTATTCTTGA	10260
TAATATAACT	TTAAAGCACG	AAAGTTACTTC	ACAAAAGATA	GAGGAAGTTT	GTAAAGCAGT	10320
TCAAATCTAT	GATGAAATCA	TGGCTATGCC	GATGAAATTT	AATACTATCA	TCTCAGAGAT	10380
GGGGTCAAAT	ATTTCAAGGTG	GGCAAAGGCA	ACGGATAGCA	CTGGCACGTG	CATTAATAAA	10440
TAATCCTAGT	ATTGTAATTT	TAGATGAAGC	AACTAGTGCA	TTAGACACTA	TTAATGAGGA	10500
AAGAATAACA	AAGTATATAC	AAAGTCAGGG	CTGTACTCAA	ATAATTGTAG	CTCATAGATT	10560
GTCAACGATT	AAGGATGCGG	ATGTTATTTT	TGTAATGAAA	GGTGGTAAGA	TTGTTGAGTC	10620
AGGAAATCAT	AACTACTTAA	TGGATCTTGG	TGGAGAGTAC	TACAGCTTAT	ATACAAAAG	10680
GAAATGAGGT	GTAAAGAAAA	TGAAGAAAAGA	AAATGAATAT	GTAATTTAA	CAACAGCCTC	10740
ACTAGGGGTG	ATGATTGGAA	TAGTGTTCG	AATTTTTTA	GATTTCCAG	TTGAATATGG	10800
TATTTCTTTA	GGCTTGTTGA	ATGGAATAGT	ATTGGTTCG	CTGATTGTTT	ACAAAAACAA	10860
TAAGAATTAA	GCATAATT	TTGCTGAAA	CTAAGGAGTA	GAGATGGCTA	TAGTTGAAAT	10920
TATAAATCTA	ACAAAAAGCT	TTAAAGATAT	TGAAGTTATT	CATAACACTT	AAATAATAGA	10980
GCAACTACAG	TAGTAGCTTA	AAAACATGAT	TAAATCGCTA	TTCTTAGGAG	TAGCGGTTTT	11040
TCTTTTTGTT	TAATACTCTT	TGAAATCTC	TTCAAACAC	GTCAGCTTG	CTTTACCGTA	11100
CTCAAGTACA	GCCTGCGGCT	CGCTTCCTAG	TTGCTCTTT	GATTTTCATT	GAGTATAAAA	11160
AGGGTCAAGT	AACTATAGTA	AATTGAAATA	AGATATGAAC	AAATCGATTA	AAAAAGTCAA	11220

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ATTAATTTCT AGAAATATGT TAGAAATTGG TTTGAATTCC GCAATCAATT TGTCAGTTT	11280
TTATTCATT TCATTTTATT TAATTAGATT TTCCAATTTC TTAATTCAAG CTAAAAATCC	11340
CCAATCGTAG TGATTGAGGA TTGAGTAAAT AAATCTAAA CAATACCTG TGCAATCATG	11400
GCATTTGCTA CATTTCAAA GGCAGCAATG TTAGCTCCTG CAAGGTAGTC TTTATCAAGA	11460
CCGTATGTTT CTGAAGTCGT TTTAGCTGTG TTGAAGATGT TTGTCATGAT GTCTTGAGA	11520
CGGCCATCAA CTTCTTCACG AGTCATGAG AGGCGAAGAC TGTTTGAGCT CATTCAAGA	11580
GCTGAAACGG CTACACCACC AGCGTTGGCA GCTTTGCAG GTCCGTAGAA GATACCATT	11640
TCTTTGTAAC CTTTGATGGC ATCAAGGTG CTCGGCATGT TGGCACCTTC AGATACACAG	11700
ATAACGCCTT GAGCAACCAA ACGTTTAGCT GCTTCACCGT TGATTTCGTT TTGAGTGGCA	11760
CATGGAAGAG CAATGTCATA GTTCCAGCG TAAGTCCATA CAGTACCTTC GTGGTAGGTT	11820
GCAGTTGCTT TTTCAGCTGC ATACTCAGTC AAACGAGCAC GACGTTTTTC TTTAACATCA	11880
ACCAAAAGAT CGAAGTCGAT ACCATTTCA TCGATGACAT AACCATTTGA GTCAGAAACA	11940
GAAATAACAG TTGCAACCGAG TTCAGTTGCT TTTGAAGAG CATATTGAGC AACGTTACCA	12000
GAACCTGAAA TAACGACTTT CTTACCAAGCA AAGCTGTTAC CGTTAGCTT GAGCATTCT	12060
TCAGTATAGT AAACCAAACG GTAACCAGTT GCTTCTGGAC GAATCAAGCT ACCACCAAAT	12120
CCAAGAGGTT TACCAAGTCAA GACACCAGCA TCAAATTGGT TAAGACGTTT GTATTGACCG	12180
TAAAGGTAAC CAATTCACG TCCACCAACA CCGATATCAC CAGCAGGTAC GTCAAGTGAT	12240
GGTCCGATGT GTTTTGCAA TTCAGTCATG AAGCTTTGGC AGAAGCGCAT CACTTCAGCA	12300
TCTGTTTAC CTTTAGGATC GAAGTCTGAT CCACCTTAC CTCCACCGAT AGGAAGTCCA	12360
GTCAAGACAT TTTAAAGAT TTGTCAAAT CCGAGGAATT TCAAGATCCC TTGGTTTACA	12420
GTTGGGTGGA AACGAAGTCC ACCTTTGTAT GGTCCAACAG CTGAGTTGAA TTGAACACGG	12480
TAACCACGGT TTACTTGAAT TTTCCATCA CGGTCAACCC AAGGAACACG GAAAGAAACC	12540
ACCGCGCTCAG GCTCAGTAAT ACGTGCCAAG ATATTTCTT CGATATACTC AGGGTGTGTT	12600
TCAAATACAG GTTCTAAAGT GTTGAAGGAAAT TCTTCACAG CTTGGAGGAA TTCAGCCTCG	12660
TGCCGG	12666

(2) INFORMATION FOR SEQ ID NO: 138:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 3083 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 138:

AGCAACTGTT	GTGAACCAAT	TCCGATAAAAT	TCCAAGAATT	GGTTAACAGA	GCCATTTGA	60
CCAAAAATCC	CGATAAAAGC	ATAGGCTTTA	AGGAGCAAAT	TGATCCAGGT	AGGAAGGATA	120
ATCAGCATGA	GCCAGAGTTG	ACGGTGTGTTG	AGACGGGTCA	AAAAGAGGGC	CGTCGGATAA	180
CTGATAAGCA	GTGCCACAAA	GGTCACAATG	CCTGCATAAA	GCACTGAGTT	GAAACTCATT	240
TTAAGATAGG	TCAAGTTTG	TGACGCAAAG	TAAGATTGT	AATTTCTAA	ACTGAACCTGG	300
CCTTCGATGT	TGAAAAGGA	TTGACCGAAA	ATCAAGACCA	AGGGTGCCAA	TACAAAGAGC	360
GCAATCCAAA	GCATGTAGGG	TACTACAAAG	AGTTTAGAGC	TTGTTTCTT	CATCTCTTC	420
CTCCTCGATT	GCATTGATCA	AACCTGCTTC	TTGCTCTTCG	ATTTCTACGT	ACTCCTCAAT	480
ACGAGCATCG	AACTCTTCTT	CGGTTTCATT	GAGACGCATG	ATGTGGATGT	CTTCTGGTTC	540
AAAGTCCAGA	CCGATTTCT	CACCCACGAT	AGCCTTACGG	GTGAGTGGAA	TCATCCATTTC	600
ATTTCCAAGT	TCGTCATAGG	CGATAATTTC	ATAATGAAC	CCACGGAAAA	GCTGGTATC	660
GACCTTAACT	TGGAGCTTGC	CTTCTTCAGG	AAGGGTAATG	CGCAAGTCCT	CTGGACGAAT	720
AACGACCTCA	ACAGGTTCAT	TTGGCTTCAT	CCACCATCA	ACCGCTTCAA	AGCGTTGCC	780
GTAAATTGCG	ACCAAGTAGT	CCTCAATCAT	GGTACCTGGC	AAGATGTTG	ACTCCCCGAT	840
AAAGGTGGCA	ACAAAGTGGT	TGATGGCTC	ATCGTAGATG	TCCACAGGGG	TTCCAGACTG	900
GACAATCTCG	CCATCATTCA	TAACGAAAAT	CCAGTCACTC	ATGGCAAGAG	CTTCTTCCTG	960
ATCGTGAGTG	ACAAAGACAA	AGGTAATGCC	CAATCGTTGT	TGTAATTCAC	GCAATTGTA	1020
CTGCATGTCT	GTTCTCAATT	TCAAGTCCAG	CGCTGATAAA	GGCTCGTCCA	ACAAGACAC	1080
ACGGGGTTGG	TTGATGATAG	CACGGCGAT	GGCCACACGC	TGACGTTGTC	CTCCAGAAAG	1140
TTTGCAGGATG	GAACGTTTTT	CATAACCTTC	CAACTGAACC	ATCTTGAGAA	CTTCCGCTAC	1200
ACGCTGCTCG	ATTTCTTCTT	TATCAATTTC	ACGCAAGCGA	AGTGGAAAGG	CAACATTTC	1260
AAACACATTC	ATATGTGGGA	ACAAGGCATA	GGATTGGAAG	ACGGTATGTA	CGTCGCGCTT	1320
GTTGGTTGGA	ATATCATTGA	TACGAACACC	GTCCTAGCATG	ATATCTCCTG	TCGTCGCATC	1380
CAGTAAACCT	GCAATAATGT	TTAGGATAGT	TGATTTCCCC	GAACCAGATG	CACCTAGAAG	1440
GGTGTAGAAT	TTCCCTTCTT	CCAACTCAA	GTTGATGTCT	TTGAGAACCT	TGGTGTGCT	1500
GTCTTCAAAA	ACTTTAGAGA	CGTTTTGAA	TTCGATAATT	GGCTTTTCA	ATTGGCATAA	1560
ATTCCTTCTT	TTTCATAGAT	TAACCGATCG	GGGCTCTGTC	AGGTCCCCAC	TACCTCTTGC	1620
AGGGAGTAAA	ACCACCTGCA	TACATCTTCG	CTACCGATAG	GCTTTCACCC	AAGATCCGGA	1680

930	
CTTCTCTTTC AAGCGTAATA CCTGAGTGT CTTGACTTT TTGATAACC GATTGGATCA	1740
AGTCCTCGTA GTCTTGCC GTTCCATCTG CGACATTGAT CATAAATCCT GCATGCTTT	1800
CTGACACTTC TACGCCACCG ATACGATAGC CTTCAAGCC AGCTTCTGAA ATTAACTGAC	1860
CTGCAAAATG CCCGACTGGA CGCTTAAAGA CCGAGCCACA AGATGGGTAT TCCAAAGGTT	1920
GCTTGAGTTC ACGTAGGTGC GTCAAGCGGT CCATTTCTG CTTGATAACC TGATGGTTC	1980
CTGGAGCTAG GGCAAATTAA ACTGACAAGA CAACTGCACC AGACTCCTGA ATAGCTGAAT	2040
GACGGTAACC AAAAGCCAAG TCTTAGCGAC ACAGGGTTTC GATTTCTCCA TCCTTGGTCA	2100
AGACCTTACA AGACTGCAAG ATGTGAGCAA TCTGCCACC ATAGGCACCC GCATTCTAA	2160
AGACAGCACC GCCAACGCTT CCTGGAATAC CACAAGCAAA CTCAAAGCCA GTTAAACTAT	2220
GACGGAGGGC AATGCGAGTT GTTTCAATCA AGTTAGCCCC AGCTTCTGCT TCAATGGTAT	2280
AGCCATCAAC AGAAACGTTA TTGAGCTTGT CACACAAGAT GACAAATCCA CGAATCCCAC	2340
CATCACGAAC GATGATATTG CTTGCATTGC CAAGAACCAT CCAAGGGATA TTTTCTGGT	2400
TGGCAAATT CACAACGCGA GCCAACTCAA AACGATTCG TGGAAAGACC AAATAATCAG	2460
CCTCTCCACC TACTTTGTA TAACTATAGC TATGCAAGGG TTCTTAAAAA CGGATATCAA	2520
TTCTTCTAA GATTCAAGC ATTTTTCTC TTACAGACAT GTCACTCTTC CTTTACAAA	2580
ATTCAATTCCA TTATACCAATT TTTAGAGACA TTTGACGACC ATAAAAAATAC CTTGTTGG	2640
TTTGCATAA GAAAAAGAGG TTCCCCCTT TTTATGATT TTTACAAAAG ATTCCTTGG	2700
TTCCATAGGC GACCAGAACG AGCTCCAGTG CTAGAACATC TTCAACCAAG ACTGGATTTG	2760
TCAACCAGCC TACTTGGAAA AGAGATGGTG CCAGATCAAA GAAGGCATGC AAGCCATAGG	2820
CTGCTAGGAG ATAAATCCAT TTCTTCTGGC GAACAGCTTG GTAAACCCAA ACTGTCAAAA	2880
GTAATTGGAA ACCAAGCGCC AAGATCGCT CAAAACCAAG CAAATAAAATC TGCCAGACCG	2940
AAAGTGACTG AATGGTTTT AACATATTTT CAGACAGTAA TTGCAAAACC TGTGGATTCT	3000
GAGTTTGAAC TGCCGAAAGA ACAATGTAAA GATTGAGTAA ACTAGTAAGG CCTAGAAAAA	3060
TCAACTCCAA GCCACCAGTC CCC	3083

(2) INFORMATION FOR SEQ ID NO: 139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 15363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 139:

931

CCGGAGGATA TTGACCACCA CCAAAAGCAG GGGGAAAATC GAAATCAACC AATAGTAGGC	60
TACTGCGACA CTGGTCAACT CACTATCTGA TGCTTGATAA TAATGCAAAA AAGCTTTAA	120
TAAAGGTTTG TCTATCAGCT CTTCACCA CTTTTCATG TCATACTCCT TCACTTATAA	180
TCTTATACTC AATGAAAATC AAAGAGCAAA CTAGAAAGCT AGCCGCAAGC TGCTCAAAAC	240
ACTGTTTGA GGTTGTAGAT AAGACTGACG AAGTCGATCA CATAACATACG GTAAGGCAC	300
GCTGACGTGG TTTGAAGAGA TTTTCAAGA GTATTAACCA ATTTCTTCTT ACCAATTCCA	360
CCATATCATA CGGTAGGGTA TTGGCAGCTT CCTTCAGGA ATAGTTCTCT AAGTTATTAA	420
CATTTGTGCG TAATTCCTTG GCATACCTAG TCGTAATCAA TCGTTTTCT TCGTATTGCA	480
AAATCAACTT GCGCTCCAGA TAATAGCCTC TCAGCATTTC ATCGATATTG TTGGGTTGAA	540
CACGATTGAT AACCCGTTG ACACAGGCAC CACTGCTGAT AATAGCTGTT TCTCGAAGAC	600
GAGACTCCTG CATAAAACTA ATCAAAGAGC GTCTGTAGAC TCCCTTCAGG TTTTCCAAAC	660
TTTCAATAAT CATCTCTGTA TTGGCAAGAT AGAGCTCTGC AATTTGGTCA TAATCAAGAG	720
CACGGAGAGC GCTTGCTCC TTGTTCTCC AGCTACGGAA GGTCTTCAGG AGAGTAAAAAA	780
CTTCATGAAG GAGAAAACGT AAAATCCTCA AGGAAACAAG AAAATAATAG GTCAGTCTG	840
AGGCAAGTTT ACGATTGATT CCTGTTCTA TATTTTCAG ATAACGTTGG TAAACTCGGT	900
AAGCACGATT GCTAATGTTT CCCTCTTCAT AGGCCTGTT CAAACCATCA CTTTCATAC	960
TAAGAATCAA GAGTTCAAA GCAGCCCAGT CTTCTTGATC ATCCTGGTTT TCTTGGCTTA	1020
AAATGAGATT TTCAATACGT CCATGATAAT TGTCAATAGC CGCATAGAGG GGAAGTTTAT	1080
TTCTGGTGTGTC TTCCAACCTCT TTTTCAACT CTAGCGTTAC TTCATTCAAA ATGGCGATAT	1140
GCATAAGATA ATCCTTGCTT TCTTCCTCTT CATCAGAAAG ATGAGGCAAG ACCAAGAGAC	1200
CTGTTAAAAA GCTAACAAAGC GTCAACACCTG CAACAAGGAA AAGCAAAAGA GGATACTCCT	1260
GTTCTAGATT ACTTGGTATC AAGAGAATCG TAGCAATCGA CACCGTTCCC TTAACACCTG	1320
AAAAGGTCAA GAGAACATG TCCTTCATAT ACTTATTTAG CTTTTCTTG AGGCCTCGGG	1380
TTCTATAGGC ATAATAGCCA TAGATCATAA TAAAACGAAT GACAAAAAGG ACAAAAGGTA	1440
GGCGATAAG AGATAGCAAT AAAAGTAGAG GATTATAGAT TGGATTGGTC AAGATAGGTT	1500
CTGCTATCAT TTCCAACCTCC ATCCCTAAAAA TCACAAAGAC AGAACCGTTG AGCATAAAGG	1560
TCACTGTATG CCAGACCGTC TCGGTACCG TATCCACTTG GGCTTCGAGG AGCGTGATTT	1620
TCTTGAAGCG ACTTGCCTTT AAAATTCCAG CAACTACGAC GGCAATAATA CCTGAAACAT	1680
GAACCTCTTC TGCCAGAAAG AAGGTCACTA GAGGCAAACCT CAATTCTAAT AAAAGTTCAC	1740

932

TGGCAATATC CGTTGCCGC ACACCTAGCA AGAAGGTATG GAGGAAGCGG TTGGTCATGG	1800
CTGTTAAAAA TCCAATTAAA AAACCGCCTA GGATTGAAAA GATGAGCGAA CTGCTAGCTT	1860
GCCCCAGAGA AAAAGCTCCA GTTGTCCAAG CTGTCAAAGC TACCTGAAAA GCCACCAAAC	1920
CAGAAGCATC ATTCAAGAGT CCTTCGCCCT TAAGAATATT GGACACGCCG TTAGGAAAGC	1980
TAAAACGCTC CGAAAGAGAG GCAAAGGCCA CCAAGTCCGT AGGACCAAGG GCTGCCCAA	2040
CAGCCAAGCA AGCTGCCAAG GGAAGGCTGA ACCAAAGAAG ATGGGCCAAG CCACCCAAAC	2100
TCAGGGTCGA GATAAAAATC ACTGGAAATA TGAGATAAAC AATGATTCGC CAGTGTAAA	2160
AAATAGCCGT AACATCTGCT TCTTCAGCCT CTCGGAAAAG CAAGGGTCCG ATAACCAGTG	2220
CCAAAAACAA CTCCGTATTA AGGTGAAAGT CAGTATTGGG TAAAAAGAGA CCAATCACAA	2280
TTCCCAAAAG AATTTGCACC AAAGGGAGAG GCAAAAAGGG CAGGAGCTTA TTGGTTGTAC	2340
TTGAGACAAT CAAAACAGT AAAAATAGGA TGAGGTAAAT CAGTAATTCC ACGCACGTCC	2400
TCCTTAATCT TTTTTACAAC AGGATTCAAA TATCTCCTTC TGCTCTTGA TTTTTGGTC	2460
AATCTGGAA CAGTCTTGT GCTCAATTTC TCTCTGGCAC CGTTCCATT CAAGAGCAAC	2520
TAATTTTTTC TTGATTTAA GCATTTTTT GCTCATATGC GCTTGGCTA GCACGCCAT	2580
CGCTCGTTCC TGGTGGGTTG ATTCAACAAA ATTCTGGCGC ATGGCATCCA GCTTTCGTG	2640
TAAGTATTGT TTATCCATGT CTGTATCTCT CTAATTTTC AATCATCACT AAAAACGGCG	2700
GGTTGTTGAC TTGGTTAAA GTTCCGTAAA TGGCAGCTGT GTACTCTTGT TGGTTCAACT	2760
GGATCACAAA ATCCAAGACA GCATCTCT CGAGATGCC TCCTCATGA CCATAGTAAA	2820
TCATAATAGC AATTCGTCCA CCTTGACAA GTAAGCCACA TAGCTTTCT AATGCCCTAA	2880
TCGTTGTCTG CGGTCGGGTG ATGACAGACT TATCAGCTGC CGGCAAATAG CCCAGATTAA	2940
AAATCCCTGC CTTAGCTTTT ATCACAAACT GGTCCAGTGT CTCATGGCCT TGCAAGATTA	3000
ACTGGCATT TGTCAAGTCA GCCTGATGCA AACGCTTTG GGTCTTTCC AAGGCTTGCT	3060
TCTGAATATC AAAGGCATAG ACTTGCTTGG CTAGCTTGGC TAAAAAAAGC GTGTCATGAC	3120
CATTTCCCAT AGTCGCATCC ACTACGACAT CCTCTTTGT CACGACCTCA GCCAAAAAAT	3180
CATGTGCCAT CTCAAGTGGT CTTTCATTT TCAAACCTCT GTTTTACAGC CTTGCATCCT	3240
TGAACACTTC CACGACGTG CATCTCCATC TCAATGCTGT TGAGGACTTC CCATTTATTG	3300
AGGCTCCACA TAGGACCAAG CAGCATATCC CTAGGCGCAT CTCCGTAAAT TCGATGGATG	3360
ACGATATGTT TGGGAATAAT TTCCAGTTGG TCACAGATGA CCCTGACATA TTCGTCCTGA	3420
CTCATCAATT GTAAACGCC CTCATGGTAA TCTCGTTGCA TACGAGTATT TGTCATAAGA	3480
TGGAGCAAAT GCAGTTAAT CCCTGAATA TCGTTATCCG TGACACAACG GCGGACATT	3540

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TCAACCATCA TCTCATGGGT TTCACCAGGC AAACCATTGA TCAAATGGGA AACAACTCTCA	3600
ATTTTTGGAT ACTTTCTCAA ACGCTTGACC GTTTCCACCT ACAATTCTATA AGAATGCGCA	3660
CGGTTAACCA GGTCAAGAGGT TGCTTCATAA GTAGTTTGCA AGCCCAATTC AACCGTCACA	3720
TGCATGCACT CCGATAACTC AGCCAAATAT TCGATGGTTT CGTCTGGTAA ACAGTCTGGG	3780
CGCGTTCCAA TATTGATTCC TACCACACCT GGCTCATTGA TAGCCTGTTCA ATAACGCTCT	3840
CGAATAACTT CCACCTTTTC ATGGGTGTTG GTAAAATTTT GAAAATAAAC CAGATACTTC	3900
CGAACATCCG GCCACTTGCG GTGCATAAAG TCAATTTCCT TATAAAATTG CTCACGGATA	3960
GGCGCATCCG GTGCCACAAT GGCATCTCCA GAACCAGAAA CCGTACAAAA AGTACAGCCC	4020
CCATGAGCCA CAGTCCCACATC ACGATTGGGA CAATCAAATC CCGCATCAAT AGGGACTTTA	4080
AAAGTCTTTT CTCCAAAGAG TTTTCGATAA TAATCATTCA AGGTATTATA AGATTCATG	4140
ACTTTCATTA TAACAAAAAT CACCCACAAT CTCAAAAGCC TGACTTTCTT ATAAATTCCCT	4200
CTGTTTCTCG TTTCCATTAG CCTTTTTTTA TGATACAATA TGGGTATGAT TTTAATGAAA	4260
TTAGCATCTA TTTTATTATT GATACTGACC TTAGTCGTCT GCATTATCCT AACCAAACCTT	4320
TTTAGATTAA AAAAACTAGG ACGAAACTTT GCGGATTTGG CTTTCCAGT CTTGGTATT	4380
GAGTATTACT TGATTACAGC TAAAACCTTT ACCCATAATT TCCTCCCTAG ACTGGGGCTA	4440
GCCCTCTCGA TCCTAGCCAT TATTCTCGTC TTTTCTTCC TTTTGAAAAA ACGCAGCTTT	4500
TACTACCCTA AATTATCAA ATTCTCTGG CGTGCAGGAT TCTTATTAAAC CCTTATCATG	4560
TATATAGAAA TGATTGTTGA ATTGTTCTTA ATGAAATAGT CGAATCCCTA AGCATTTCCT	4620
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GCTATCCCAT GCATATTTCAC TATAACACAA ATCAAACAAAC TTTACCACTA GAAATCAGTT	4860
CCTTCTTACC ACAAGATCAT CTCGTTTTA CTATTGAAAA AGTGGTGAAT ACCTTGGAGG	4920
AACGTCACTT CTACACCTCC TATCATGCCT TTGATGCCCT GTCTTATCAC CCTAAAATGC	4980
TTGTATCTAC TCTTCTATTT GCCTATTACAC AAGGGATTTT CTCTGGTCGA AAAATTGAAA	5040
AATGGAAGAG TTAGTGACCT TAGATTGTTT GTTTATTGAC AGAACTAAGA TTGAAGCCAA	5100
TGCCAACAAAG TATAGTTTG TGTGGAAGAA AACGACAGAG AAATTCTCCG CCAAACCTCA	5160
AGAACAGATA CAGGTCTATT TTCAAGAAGA AATCACTCCC CTTCTGATTA AATATGCCAT	5220
GTGGATAAG AAACAAAAGA GAGGGTATAA AGAGTCAGCT AAAAACTTAG CGAATTGGCA	5280

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CTATAATGAC AAGGAGGATA GCTACACACA TCCTGATGGC TGGTATTATC GTTTCACCA	5340
TACCAAATAT CAGAAAACAC AGACAGACTT TCAACAAGAA ATCAAGGTTT ACTACGCCGA	5400
CGAACCTGAA TCAGCCCCCTC AAAAGGGACT GTATATGAAC GAACGCTATC AAAACTGAA	5460
AGCTAAAGAA TGTCAAGCGC TTTTATCTCC CCAAGGTAGA CAGATTTCG CTCAACGCAA	5520
GATTGATGTG GAACCTGTCT TTGGCAGAT AAAGGCTTCT TTGGGTTACA AGAGATGTAA	5580
TCTGAGAGGG AAGCGTCAAG TGAGAATTGA CATGGGATTG GTACTTATGG CCAATAACCT	5640
CCTAAAATAT AGTAAAATGA AATAAGAACAA GGACAAATCG ATAAGGACAA TCAAATCGAT	5700
TTCTAACAAAT GTTTAGAAG TAAAAGTGT CTATTCTAGT TTCAATCTAC TATACAATAA	5760
GAGAATGACT CAAAATTAAA AAGCTAGAGT TCCACAATTG GAAATATCTA GCTTTTTGT	5820
GGTTGAGAAC TATTTGTCT CAGGCTCTT ATCTTCTATT TAGGACAAGA GTTTTCTTT	5880
GGTCTTTAAT GATAAAGAAC GTATCAAAT TTCTAGTCTT CTTTTTACCC TTTAGTAAC	5940
ACTAATCCTG CACTCAAACC TAGAAGAGTT AACCTGCTG CTACTGCTGC TTGGCTGCC	6000
GCACACTCTG TACTTGGTAA CTGGCCTTA TTAGTTGAC TAGCTTCACT TGAATCAATT	6060
GGTTTTGTAT CTGCTTTTC TGACACTTGT GGTTTTTAG CTTCTTGAGC TACTGGTTG	6120
GTTCCAACCA AGACGATGCG GTCTGTCGGA ACTTCTACCA CTTCACGGAG TTTTCTTCC	6180
TTACTTCCAT CAGGATTAAT CGCTGTAAAG ATACGTTCTT TTCCAACCTTT TCCTTCTTGT	6240
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AAATCTTTT CAACAAATTC GATTTTGGA AGATCTTCTT GTACAGCAGC AACTGTCTTC	6360
TCAGAAACTG GTTTTCCCT AGTCAAGTGG ATACGGTATT CCTTGACTTG TTTTCCACTT	6420
TCTGAAACGA GGCACAAAG TACTGGAAAG CTATCTCTC CACTATCTAC CACAGTTGAA	6480
GCTACTTGAT TGTTTCTTC AACTGAGACT TTTGGCCGTT GACCTTATAA GGTAATTGA	6540
TAGTCTTGAC GATTTTCAGC GAAATCAGCA AGTTCTTTC CATCTACAAG AATCTTGAT	6600
TGAGTGCTTT CTTGAGGCAA TTCACTTGGT GCAAGGAAGG TCATCTCAAT CATCGCAACA	6660
CCGCTTTAT CTGCTTTACG CTCCACACGC CATCTCATAG CTTGGCTTT GATAGCTTTA	6720
AATGTTACGT TGATTTCATC ACCAGCTGCA ATGTCTTAT CCGCACGATA AGAACAGCT	6780
TCCCAATTCTT CTGGATTGTT GAATGGATGG TCTGCGTCGT AGGCTTGGTA GTTGAAATAG	6840
TAGGTTGGCA CTTCAAAACTC TGGACCGACA TAGCGTTCTA AAACGAGTTT AGATGGTGCA	6900
TCCGTACAC TATCTGCAAA GAACTGAACT TTTCCTTGT TAACAGTCCG TTCTACAATC	6960
TTACCATTCTT CACGGAAAAT CACACCCGCT GATACTTCTG GATTAGAAGA TGGTGTGGT	7020
GACCAGTTG TCCAACGACG ATTTTCTGAA TGATCTCCGT CATTGAGATA GTCAACGCGG	7080

935

TCATGAGAGT	TTTTGTCAAT	ATCATTGGTT	GCTGAAGCAA	AGGCCTGGTT	ACTGTTTCA	7140
TCATAGTTAG	GGTTATCTGA	AAGAGTCTCA	CCAAGTTGT	CTGTCACTCG	TACAGTGATC	7200
TCAGCAACAA	GGTTACTACC	AAGGACACGG	CCTCGAACAG	TAAATTGACC	TGCTTTGTC	7260
AGATTTCCG	CTGGAACCTTC	TTCCCATTCA	ACTGTCAGGT	CTTTGTTTC	GTAGCCGTCT	7320
TTACCTGTGA	AGTAAACTGG	AACCTTAGTC	GGCAATTCAA	GTGCTTGACC	TACTTGTAGC	7380
AAGCGAGCTT	GTTAACCGC	AGCAACTGGT	TTATGAGAAA	GTAAGCTCTT	ATCCTTAGTG	7440
AAGTGCAGAC	GGTATTCTCC	TAAGATGTCG	CCATTTTCAG	CTTCGCGAT	GACACGAAC	7500
GGCTCACCTT	CACGAACGCT	TGGAACGACG	GTAGCGAGAC	CATTGTTGCT	AACACTTGCT	7560
GTGACTGCCG	GAACTTTCC	ATCTACAGAC	TCAAGGTAGT	AGTCTGTCAA	ATCAGGGTTG	7620
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ACITGTTTCG	CAAAGATTTG	TACCTCTGTG	ATAGACGTT	CACGCTTGT	ATCTGTTTA	7740
ACCATGCGAA	TACGAACAGC	ATAGGTTCA	ACTTTATCAA	AGCTAAAGTG	GTTCATTCT	7800
CCAGCCTTGA	GTTGAGCAGG	GGCTTTAGA	TTAGTAACTG	GTTCAGTT	GGCAGAACATCA	7860
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TTACCAACAT	AATACTCAAT	CACATAAGAC	TTCGGTACAC	CAACTCCATG	GTCTTCATGG	7980
AATCCGACAC	TTAGATTATC	AACGGAGCGT	TTGCTCAAGA	TACCTGAATC	TCCAAACAGA	8040
ACACCGACTG	AAGCTTCTGG	ATTAGTACGA	TTCCAGTTG	TCCAACGATT	GGCTGGTTGG	8100
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GAAGCAAAGG	CAAGTGGCAA	TTCTGAACCG	GTCCATTGGT	CAGAAATGTT	TGCACCTTGC	8220
TCAGTTTGAG	CAGATACGCG	AACATGAAGT	TTAGTTGTTA	ATTGCGTAC	TTCTAACGCA	8280
CCATTAACG	TAAAGACACC	TTCCCTAGCG	TATTGCTCTG	GACGAATCG	ATCCCACATGCA	8340
ACCTTAGCTG	ATGAAACGTG	ACCATTGAA	TCATATGTCC	GAACACTTTC	TGGTAATTGT	8400
GGTGCTTCTG	CGATTGGAGT	TGTCACACTG	ACTTCTTCAA	CTGAAACGAT	ACCTTCTACA	8460
GAGACTTTG	CACGCGCTTC	AAGGTCATT	CCTTCAACTT	TACCTAGTAC	TTCAAATGTT	8520
TGATAGGAGT	CTAGTTTTC	TTTCGGAATA	GCTTGCCAAG	TGACTTTATG	AGTTTAGGG	8580
AAACCTTGT	CATACTCAAC	TGTTACTGTT	GCTGGAAGAC	TTGGTTCTG	ATGCAAATCT	8640
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GTGAGTTCAA	CTTGGTCTTT	AGCTCCCTCA	TATTCAGCGT	TCAGAGTGAC	TGCTCCTGGC	8760
TTATGCAACT	CAAGCATTCC	TTTACGAATT	GCGACTTCCC	CTTCACCACT	TGTAGAGAAG	8820

936	
GTACTTTAT CAGCTGGTAA TACAGCTTGC GTTCCATCTT GATA GTGAGC TCGAACCGAC	8880
AATTTGACAG TTTGGCTTTC TTTGAGACTG TCAGCTTTT CCACTTGCAA GCTCAAGTGA	8940
GCAATTTTG GCGCTTCTTC AAGGAATTGA ATTGCATAGG TTTGAAGAGG GCCACCAC	9000
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CGGTATTGCA TTGGTTTTG ACTAGTAAGA CCTGTTACTG CCTCACCAAC ACCGTTACA	9180
GTTGGTACTG CAGGTGCCGC AGGATTGCCT TCTTCTACCA CAAGGGTGC ATGAATTGGT	9240
TGACCTTCTA AATAACCGGT CGCTGAAATA CGAGAACCTG GAATTGCTAA CTTAGCTTTA	9300
TCTTCTCGG CAATCTCCA CTTGTCACACT TCATACTCTT CAACACTTCC ATCAATCAA	9360
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ACTGGTAGCT CTGATTTAAG AGCAATCACT TCTACACGAG CTTCTACTTC TCGTCCGTCA	9480
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TCATGTTTG GAATGCCGGC TGTATCTACG ATACCAAAGT AAGAGCTCTT AACAGGAGTT	10440
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TGTCCAGCAT AGCCAGCGTT GTCACGGTCA AAAGTCCATG AAGCGGTTGC TGTTTCCCC	10560
CAACCCACAC GATCATTCC ATAATCTGAC TGTTCTAAAT TACGCTCAGG TCCATTGCTA	10620

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TCTGATCCAT	AAATCAACCA	TTTTGGATGC	TTAGCTCTAA	GGGCTTGTA	ATTATCTTCA	10740
GAATAGTTAA	ATCCAACAGC	ATCGAGTTCA	TCAGCAATT	TCTCATGCC	TCCGCTACCA	10800
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ATAACCTAA	CCAAACGTTT	AACAGTTGCT	AAAGAGTGGG	CATCACCATT	AGCTTCACCT	10920
ATTCATTAC	CAATTGACCA	CATGAAGATA	GCAGGGTTGT	TTTGCCTCT	TTCGACCATG	10980
GTACGTAGGT	CAAAATCAGA	CCATTTTCA	CCTTTTCGAG	CTTCTGGGTG	AGTGGCATCT	11040
TTTCAAAGA	AACGTCCATA	GTCATAAGGT	TTCTTGCCAC	CATACCACGT	ATCAAAGGCC	11100
TCTTCCTGAA	CGAGTAAACC	TAGTTCTGCT	GCGATTTGCA	AGGTTTGCTC	ACTAGCAGGG	11160
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TCTGCTTTAT	AGTTTCTTC	TGCTCCAAGC	GCCCCATGGT	CGTGGTGCAA	GGATACTCCA	11280
TGGAATTAA	TACGTTCAC	ATTCAAAGAG	AAACCTTCAT	TTGGAGTCCA	GTGATAGTAA	11340
CGGTAACCAA	ACAAATCCTT	CTTAGCATCA	ACCAATTGAC	CGTCACGGTA	AACACGCGTA	11400
ATCAATTCTG	ACAAGGCAGG	TTTGTCAATT	AAAACAGTCC	AGAGTTTGG	TCTTCAACT	11460
TCTAAATCG	CATCTAGGCT	TGTTGATTCA	TGTGCTTTA	AGGTACGACT	CGCTGTACGA	11520
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TGGTCTTTGT	CGTCCGTATT	GACGATTTG	CTGGTCACAT	GAGTTCAAC	CTTGCCATGT	11640
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TTGACATAAA	CTTGAGAATC	CATGTAGACG	CCATCAAAG	TAAGGCGAAC	ATTTTCTTG	11940
AGGTCTTTT	CATCTAGTTT	GAAAGTCTTG	CGATACCAAG	CTTCCCCACC	GTTGAGCTGT	12000
CCACCTTCAT	TTTGTGCAGG	AGATTCTG	TCGAAATCGT	TAAAGATACT	CCAGTCATAC	12060
GGTAAATCTA	ATTTTTCCA	CGTAGATACG	TCTGCATCAG	GTAAATGGC	TTCCCTAGAA	12120
TTTGCATTGA	GTTTAAAGTA	CCAATTGTA	TTAAATCCA	CTTCCCTGTC	TTCAATCATT	12180
TGATTCACTT	CTTCATTG	TACAGCTTCA	GCATCTCCT	TGAGCGGTT	TTCTTGATTT	12240
GAAGCTTGTG	ATTCTATCCT	TGGAGCTTTT	TCTTCCGGTT	TAGCAGACAC	TTTTCCCTCT	12300
TTTGGAGTTA	CGGCTTCATC	TTCTTCTTC	TCAGATGCAA	TAGCCTCAGT	TGAACCTAGGT	12360

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TCACCTTGTT	CTGTCCTTTC	AACTATATTT	TTAGTTCCA	AAGCTTTATC	AGCCTTTCT	12420
TCTACTATCA	TTTTTCCTC	TTTAGGTTTC	TCAGCAGTAT	GAGTAATAAG	TGTTTCATCC	12480
GCATAAACTA	CAGATTCTCC	AGCTATATTT	CCTCCTAATA	AAACTGCACA	AGTCCCAATC	12540
ATTACTGAGC	AAGCTCCAC	AGCAAACCTA	CGAATGCTAT	AAACTCTTT	CCGATTCCAA	12600
TGGCCTTCC	CCATAAAAC	CTCCTTATAT	TATATTTAGT	GCAGTTAGCT	ACTACCAAAG	12660
CCCAAGTGGT	ATACATGGTA	TGACAACCTA	GTTCACAACAA	TTTACACTCT	GCGAAAATCC	12720
AATTCAAAC	TCGTCAGTGT	CGCCTGCCG	TAGATATGAT	TACTGACTTC	GTCAGTTCA	12780
TCTACAAAC	CAAACCATG	TTTGAGCTG	ACTTCGTCAG	TTTCATCTAC	AACCTCAAAA	12840
CCATGTTTG	AGCTGACTTC	GTCAGTTCA	TCTACAAACCT	CAAACCATG	TTTGAGCTG	12900
ACTTCGTCAG	TCTTATCTAC	AACCTCAAAA	CTGTGTTTG	AGCAACCTGC	GGCTAGCTTC	12960
CTAGTTGCT	CTTGATTT	CATTGAGTTT	ATATTTATA	GGAGGCGATT	ATTTGCTTT	13020
TGCTGCGTAC	TCTTCGTTAC	GTTGATCAT	TTGTTTCTG	TACCAAGCAA	AGATACCGAT	13080
ATAGAATACA	AGGAAGACTA	CTGCACCAAG	GATTGCTTTG	ATATCACCAG	TTGTAGTGT	13140
ACCAATTGTC	CAACCAAGAA	GTTCGAT	TGGCCTTCA	AGAGTAGAGT	GAGTAATCAA	13200
TTGAGTTGG	CTCACACCTT	CTGGGAAGGC	ACCTACACCT	TTAGCAAGTT	CTGTTGCAA	13260
TGGTGCAATA	AGTGTACCTG	AAAGAAGGAA	GAGTGGCAC	AAGAGTGT	CGAAGATAAT	13320
CATACGGAGC	AATTTACAC	GAGTTACAAC	CAAGAGAGCT	GGAGTAACAC	CCATAGCGAT	13380
GATACTGCA	AGTGGCAAGA	TACCATTTCC	AACTTTGAA	AGAAGCACTG	CTTCAATCAA	13440
CATGATTGGT	GCAAGTACGT	TGGCACAAAGC	CCAGATTCA	GCACGACCA	CGATGAATGG	13500
CCAGTCAGA	CCGATATTGA	ATTTACGTCC	TTGAAGACGT	TTAGTAGCAA	CGTTGTAAT	13560
ACCTTGAT	AGTGGTTCTA	CGGCTGCGAT	GAACCATGAA	CCGATAAGTG	AGAAGAGTT	13620
CAAAGATACA	CCGGCAGTCA	AAACCAAGAGA	CAACCACCT	TTGATAACAA	GACGCCATT	13680
ATCTGCATCT	GCAACACCTG	CAATTGGATG	TGGAGTTCCC	ATAATACCGA	TAACGATACC	13740
AAGGATGAAA	CCGATGAAGA	ATTTAGATCC	CCAGAAACCG	ATTTTCTTGT	TCAATTAGC	13800
AGCATCAAAG	TCATATTAT	CAAGGCCTGG	GAAGAATT	TCAAAATCT	TATCCAAAC	13860
CATGATAACT	GGGTTCATCA	TGTAGTCAT	GTGAGTTGAT	GTCATTGGTG	ATGAACCTGG	13920
GGCGTTAAGA	AGGTCACTAA	ATGTAGGTTT	CATCAAGTCA	GAGTTGATAA	TTTCAACAC	13980
ACCGACAAGG	ACGATAGCTG	CTGTAGCAAT	AAAGAGTGAA	ACCCCTTGAC	TCACACCATT	14040
GTTATCAGCA	TACCATTAA	TCAAGAGACC	TGTGATAGAC	AAGTGCCAGA	TATCAAAGAT	14100
ATCGACATCA	AGTGTATCTG	TTTCCTTCAT	AGCTAGCATC	ACTATGTTGA	CAATCAAACAT	14160

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GATGAGCAAG AAGTATAGTG TCCAAGCAGA ACCCCAAGTG ATTGTAGCAA GTGGTGCCCA	14220
ACCAAACGTCG GTAATACTCA ATTGGATACC AGTGTGTTCA ACGAATTGTTG CTAGTGATGC	14280
TGAGAAAGCA GTGTTTAGCA TACCGATGAT AGCACCGATA CCTGTAAGAG CGATGGCAAG	14340
TTTGATACCA CCTTCAAGCG CTTTGGAGAA TTTCACTCCA AAAAGTAAAG CCAATACTGT	14400
CAAAATGATT AACATGATGA CAGGTCCACC CATTCTAAAG ATGGGATTGA AAACCTTCC	14460
GATTAGGTCA AAGATTGCAT CCATAACAGT TCCTCCCTTT TTGATGTTAT ATGAATGTTA	14520
ACAAATTAGA ATTAGCTAA TCCGTGTTCT TTAATAGCTG CTTCAATATT GTCAAATACT	14580
GGAGCGCTCA TTGCTGGGAT ACGGAATAAG ATTGGCCAG CTTCGATAAC TGGGATACCT	14640
GGTTCAAAAC CAAGGTCTGT TGCAGCGATT GGTGTAAAGA TATCGTAACC TTTCATAAGG	14700
TCTTCGTTTA CATCTTCAC CATGACTGCA TCACAGTGAA CATCATAACC ACGGTTGAA	14760
AGTTCTTCTT CTAGAGCACT TTTAATTGAG TGACTTGAGT TAACACCTGC ACCGCAGGCA	14820
GCAAGAATT TAATCATTAA GATTCCTCC GATTTTATTG TTTAATAGAC AAGATTAAGC	14880
GGTTGCTTCA GCAATGTAAG TATAAAGGGC TTCTGGTTCA GAAATTTTG ATAGGTCTTC	14940
AAGATGACCA TTTCCCTGTGA AGAAGTCCAT TAACTGAGCA AGAATGTTG TTTGACTTGA	15000
ACTTGAATTA TTAATGATAA AGAAGAGTAG GGATACTTCT ACTTCCTTAT CAGGAGCTAT	15060
CATATTGTGA AAAGTTATTG GTTTTCTAA TCGAACAAACC ACCACTTTCT CAGCTAGATT	15120
ATGAAACAATA TCTGTGTGAG GAATCGCTAC ATTTGGCAAG TCCTTCCCTA GAAATCCAT	15180
ATCTAAACCA GTTGGAAATG ACTTTTCACG CGTGATCAAG GCTTCACGAT AAGTTGGAGT	15240
GACAATTCT CGTTCTTCA ATAAAGTTGC AACCTGATCA AAGAGTTGTT CTTGACTATC	15300
CGCTTCTAAC CAAAACACAA GGTTTTGTC AAAGAAATAA TCTAATACCA TAAGTTTTC	15360
CGG	15363

(2) INFORMATION FOR SEQ ID NO: 140:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28882 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 140:

TAAGACTATT TAATAGTGGA GTGAAATAGG ATACGAACAA ATTGATTAGG AAAATCAAAT	60
GAATTTATAG AAATCTTTA GCAGTTATGT TATCCTATTC TAGTTCAAA ACGCTATAGA	120

940	
AGCAGCATTG TGCTAGTC KA GATTCA GTTT ACTATACTAA AACGAGTAGC TTGAAATCAA	180
AAAACCCACC CTCACAGGCA GGTTTTATCT GTATTATTCA GCTAGATTAT GCTTTACCTT	240
CTGAACCGAA TACGTCGATA CGTTCTCAA CCGATGCTTG GATAGCTTT ACACCGTCAG	300
CCAAGAATT ACGTGGGTG AAGAGTTTT TCTTGTGTA TTCTGCTTCG TTTGCTTCGT	360
AGTCACGAGC AAATTTACGA GTTGCCTAG CGAATGCGAT TTGGCATTCT GTGTTAACGT	420
TAACTTGGC AACACCAAGT TTGATAGCTG CTTGGATTTG CTCATCAGGA ATACCTGATC	480
CACCGTGCAA TACGATTGGG AATCCTGGAA GAGCTTCTGT CAATTTTGC AAGTGGTCAA	540
GGTCAAGACC TTCCCAGTTT ACTGGGTAAG GACCGTGGAT GTTACCGATA CCAGCTGCCA	600
AGAAGTCGAT ACCAGTTCA ACCATTGCTT TAGCGTCTTC GATTGGAGCC AATTCAACCTT	660
TACCGATGAT TCCATCTTCT TCACCAACCGA TAGTACCAAC TTCAGCTTCT ACTGAGATAC	720
CTTTAGCGTG TGCTTTTCA ACAACTTCTT TAGCCAATT AAGGTTTCT TCAACTGGAA	780
GGTGTGAACC GTCAAACATG ATTGAAGTAT AACCAACTTC GATACACTCA AGTGCATCTT	840
CGTAGTGACC GTGGTCAAGG TGGATAGCTA CTGGTACAGT GATACCCATT GATTCAACAA	900
GGTTAGCGAT CAAGTTGCGA GCAACTTTGT ACCACCCAT GTATTTAGCA GCACCCATTG	960
AAGTTTGGAT CAAAACCTGGA GCTTTTTAG CTTCTGCTGC GCGCAAGATA GCTTGAGTCC	1020
ACTCAAGGTT GTTTGTGTTA AATCCACCAA CTGCATAACC GTTGTACGG GCTGCTTGGA	1080
CAAATTTTC TGCTGAAACG ATTGCCATT TATCAGGCCT CCTGTATATT TTTATGGTC	1140
ATCCCATTAA CATTGTCAT TTTATCACTT TTTGCCAAA AAATCTAGTT TTTCCCGCAG	1200
TTTCGATTGA TTTCTTCTA ACTCCATCTA TGAAACCCCT TTCTCTCCCT AGTCTTGGAC	1260
GACTTTGGAA AAATCTATAA AGAAGGTTAA ACTATTCTCC TCCATCTCGA AACGATAAGC	1320
TAATTTTC TGTCTAATA GACTCTAAC CACAAAGAGC CCCATACCAAG ACCCCTTGAC	1380
CTTGCAGTC GCATTGTCAG AAAAAGACTG GGCTAGTTT TCTTGTCCCT CTGAGCTACA	1440
GCTATTTCCG ATAAAAAGTT CTCCTCTCT TTCTCCAATT CGAACTAAGC CACCTGGAAC	1500
AGAGTGCTTA ATGGCATTG TGATGAGATT AGAAAGAATC AACTTCATAA CTGATGGTT	1560
TAGATAAGCC TGCTGATGGG TCAAACATT GTCTATCTGG AGCTCTTTT CCTTGGCTAG	1620
CAAGGCATAA TCTTGACCA GATTTGCGT CATCTGGAGG AGGTCAATTG TTTCCCTATC	1680
ATCTCGCAAT TCCTGCACAG AAGAGAGGAA AAGTATCTGC AGAACATGGT GATTGAGTT	1740
ATCCACAATC CCCAAGGCAA CTCCCAGATA CTGGTCTCTA TCCTTATAAC GACCGATATT	1800
CTCTCTCATA TTTTCGATTA GGATTTCAA ACTAGCCAGC GGTGTTTCA ATTCAATGAGA	1860
AGCTCCTCGT AGGAATTGCA CCTTCATCTT CTCCAGCTGG AGAATGGCTT CATTCTTTTC	1920

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ATGCAAGTCC	GCAATAACAG	TCAAGAGATG	CTGGTAGAGG	CTATTGATTT	GTTCCCTTGAG	1980
ATTACCTATC	TCATCCTTAG	AATCCACGCG	CAATCGCACT	TGGGAATCCA	GGTCCATCAT	2040
CCGACGGGTC	ACCCGCTTGA	TTTCCAAAAT	CGGTGCAACA	ATAGTCCGAG	CGTAGATGTA	2100
GGCCACCAAA	AGGGAAATCA	GAAAGGGAGC	CAGCAAGGTA	TAGGGAAGAA	ACTGGAGACT	2160
GATTTGCTCC	GCTTCCTTTT	GTAAATCCAT	GGAAGCTAGA	AACTGGAGAA	TCATAGTACC	2220
ACCGTCTTGC	GTTTTCACCT	CGCGCTCCTC	AATAAAGAGA	GAGGTTGTCT	GGCGGCTGT	2280
GTCCAGAGGA	AGACTGTCCT	TGACTTCTAA	CTTGTCTCG	GTCATCTCAC	CTTTGACGGT	2340
CCCCTTGATA	TCACTAGTCT	GGGAATACAA	GTCTAACACT	TGCTCGATAAC	TCTGCCTATC	2400
TTTCCCTTCT	AGGGACTGGG	CAATGGCTGT	TGCCTTTGA	CCAATGGTTT	CCTGACGATG	2460
ACTCAGATAA	GTCGAAGGAA	AAACAAAATA	AATAGCTAAA	TGAAGGCAGA	TAACCAGAAC	2520
ACTAAATATC	GAGAAGGTAT	AGATAAATAT	CTTTGCAAAT	AAACCTGTT	GTTTCATTTT	2580
CGCTCCAATT	TATAACCAAC	ATTGCGCACA	GTGAGGATAC	AATCCAAGTC	TAGCTTTTC	2640
CGCAATTCC	TGATATAAAC	ATCAATAACA	CGGTCAAAGG	GAACCTCATC	TGTCGCTTTC	2700
CAGACGGCAT	CGATAATCTG	AGATCGAGTC	AAGGCCCGGC	CTTCATTTT	CACTAGATAG	2760
TCCAGAATT	CCAACTCTTT	GGCATTGATA	GGCACTTCTT	GACCTGCGAG	GCTTGCACTG	2820
CGCTTGAAA	TCGCGTCCAC	CCTCACTTT	AAAAGGGAGA	GGGAGAAAGG	TTTTTCCAGA	2940
TAGCCATCTG	CCAAAGAGGC	AAAGGCACTC	ATCTTGTATT	CCTCATCTTG	AAAAGCTGTC	3000
AACATCAAGA	CAGGAACCTG	ACTGGTTTA	CGAATCTCAG	CTAGGACTTC	TAAGCCGTTG	3060
AGCTTGGCA	TCTGGATATC	CAGTAAAACC	AGGGCCACCT	CATAGCTAGA	AAATTGCTCC	3120
AGAGCTTCCT	GACCGTCCGC	TGCCTCAATA	GTTCATAGC	CACAATCCGT	CAAATAATCA	3180
CTGACCCCT	CACGGATCAT	CTCTTCATCT	TCTACAATT	AAATTTCAT	ACTTTAACTG	3240
CTCTCTATTT	TTTATTTTTC	TTAGAATAAA	TACCTACCT	ATTTTCTATT	ATAGTCTCTT	3300
GCTGGCCTT	TGTCTGCAAG	CAACTGACCA	CTAGATAAAA	CGTTGTGAAA	TTCCTTCTC	3360
ATAAAATTCCA	TAACTTAGT	ATATTATATT	TAAGCACTAA	AGTACAAAGA	AAGCAACTGA	3420
AAGCAATGAT	TTTCACCACT	GCTTCGGAT	TTATTTGAA	TTGTTAAATA	GCCATTCCCTA	3480
TCCACTATTC	TTGAATAGAA	ACACAAGATG	CAATCTTAT	TCTAGACTCA	TTTTTTCAA	3540
TTTATTCAACC	ATCCAGCAAG	AGCTCTTTG	GTTGTTTCT	AAGGAGATTG	CTTGAAGCAA	3600
GCGCCATAAC	GAGAACCAACT	AGAACCAAGG	CAAGGACAAA	AATGATGATA	AAGTCTGATG	3660

942	
TCTGAATGGA AATGTCTAGG CTCGACAAGG TCTTGCTAAA GCCATCTACT TCTGCACCAC	3720
CACCAAGGTT AGAGGCTTGA GCCGCCTTAC TAGCCTGTTT GGCAACACCT GAAGTCACAT	3780
TGGCAAGGAC AGTGTTCGA ATTGCACGGG CAGTGTATT AGCTAGGAAG TAAGCAGAAA	3840
CTAGAGCAGG GATAGCAATC AAGATAGATT CGGTGATGAA TTGACCCAAG ATACTTGCCT	3900
GCTTGAGGCC GATAGAGAGG AGAATTCCCA CTTCCCTGCG ACGGGCGTTG ATCCAAAGGC	3960
TGAGCAAGAG GGCAAGGAGG AGAACTGAGA AGCTCAAGCT ACCCCAGAAG AGGAGGTTGG	4020
CCATCTTGTGTA CATACCAGAG ATAGATTGCT CAAGAGCTGG GTAGTTAGAG GAGCTCTTGA	4080
CGAGTGTGTA GCTCTTCCAG TTGATACCAC TGATGCCATT CAACTCTTTC ATAACATCAT	4140
CCAAGTTCTT GTCTGCTGTT ACAAAAGAAGG TTGCGTCCCC ATAAATGGCT GTGTCTTCTG	4200
TGTATCCATA AAGTTTGCA GCAGTGTGAA TGTCTGTAA AGCTGTGTT TCGTAAAGTT	4260
CTTGTGAGTA GGTTACTGCT GACTTATTAT GACCATCAAA GAGTCCCTTG ATTGTCACTT	4320
CAACTGTTTC CTTGGCTCCT TTTTCATTAT CTGCATCGTA GATATTAGAG TCCAGTTAA	4380
CCTTGTCCCC TACTTCCAG CGCGTGGTGG CTGCCAAGTC CTTGTGCAAG AGGATTTAT	4440
CCTTGTGTCGTC GTTGGTTAAG TGCTCTCCTT CGACTACTTT ATAAGAACCA GAGACAAACT	4500
TGTCTTCTTT AGAGGAGTCA TTGACACCTG TAATCATCAA GCTACTTCCA AAACGCTTGG	4560
CACGATCAGC AGTGAGATTC TTCTGGTTT CTGGCGTTTC AATCAGGTCA TATCCAGTCA	4620
AATCTCCGAT AGCGTTGATA CGTTGACAT AAGACTCAAT GGCCTGTTT TCGGTGATTT	4680
TTTTGATGTC TTCACCCTTG ATATTCCCAG CACCAAGGAG CGTTCCCTGG TTGACCGCAG	4740
GATTGATTG CATGGAGAAG CTATTGGTGA TATTTTAAA GGTCTCTGA GAAGCCTTGG	4800
CAGTAGCTCC CTTGATTGAC AAGCCGACCA AACTCAAGCT CGCCATGAGG AGAATAATCA	4860
GGAAGATGAC AATCGATTG AAAAACTTCC TTGTAACATA GGCAAATGCG TTGTGTAACA	4920
TAGATTCCTT TTCTAGATTT TGTGTTAACATC ATTCTATTAA AATAAGCTCA AATTATTTAC	4980
TAGTATTGCG CGTTTCAGTC AGTTTCTTAT CCTTTAATTC AAGTGTAAATA TCTGACGCTT	5040
GTGCCACTTC TTTACTGTGA GTTACGACAA TCACACATTT ACCTGTTTC TGGGCAAGTG	5100
ATTTGAGTAG TTCGACAATA TCTCCAGCAG TTTTAGGATC CAGATTCCTT GTGGCTCAT	5160
CAGCTAGAAT AACTGGAGCT TCTGAGACCA AACTGCGAGC AATGGCAACA CGTTGCTGTT	5220
GACCACCTGA TAACTGGAGA ACATTCCGCT TGATCTGGCT TTCACTCCAAA CCAAGCTCAA	5280
GAAGTGTATT CTTGCTTGCC TTTTTGTTGA CCAATCGGAT ATTTTCCAGC GGAGAAAGAT	5340
AATCTATCAA GTTATAATTT TGAAAGACCA GGGAAATATG GTGCATGCGA TGGTAAGAAT	5400
AGCCCTTCTT ACGAATATCC TCTCCTTGAA AAAGGATAGA ACCTTCAACA GGACTATCTA	5460

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GACCAGCAAG TAGGGACAAG AGTGTGGATT TTCCCTGCTCC TGACTCCCCA ATAATACTGT	5520
AAAATTTTCC GGGTTCAAAA TTATAATTGA TCTGATATAG GACTGCTTCA GCAGTATTCT	5580
TATAACGGTA GGTAACATCT TGTAAATTGTA ATAAAGTCAT GATTTCTCCT TCTTAACTAA	5640
TAGATGATAA AATTCTTTC GGTGATTTC TAAATAAGAA TAGGAAACAA AGGGCTACAG	5700
ATAAGCAACT AAGCAGAACT AGAAAAACAT AGGATTCTGC AAAAGATAAG ATGCTAGTTG	5760
ATAAAAGCTG TGCTTGGCT AGTGTATCTT GTAAGCTTGC CTGATCTCA CTTGCTAGTA	5820
GAGTTTGGAG TAGGTAAGTT GTGATTGCGT TTCCCTGCAAC AAATGCTGGA AGCAAAGCTC	5880
CAAGAGATAC CAAAACCTAC TCTAAACAGA ATTGTAGGAA GATCGAGCTC TTGCCTTTTC	5940
CAAGTGCAAG TAAAATCCCC ACTTCATAGA CCCGTTCTCT CAACCGAGA GACAAAACCA	6000
GAATTAAGGC TCCAGCTCCT GCTATCAACA TCCCATAAAG GAAGATGGTC AGGAAGGTTT	6060
GGAAAGTTGC AACTGAGTCT TTGATTGTT CAAAAGCCTT GTTTTCCTTT TCGACTTGGT	6120
AGCCTTGATT TTCCAAGGCC AAGTTTCTA CCTGCTTCAT GAGTCCGTCC ATTCCTTAG	6180
GATTTCTAC ATAGAACGCGT GCTGCACTGA CTTGAGCTTC ACTATTGCC AAAAGGGTTT	6240
GGCTACTTTC ATAGTCTGTA AAGACTTGAT TTTCACTGAA GTCAGAAGAC AAGCCTGTGA	6300
ATTTCTCTTG TTTTTTACCA GAAAAGATGC CGATAATCTC AAAACTCTACT GTTTGTCCTT	6360
TTCCAGATTIC AGACTGACCA GCATCCAAGC CAATCTTGTCA ATGAAGCGAA AGACCGTTCT	6420
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CTTCTTTAG ATTGAAAGCC GAACTGGTAA AGGTTACATC CTTGGATGAA TCCTCAAGAG	6540
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CGCCAGTCAC TGCTTCTTG TCTTTAGTT TTGCGACCGT CTCAAGTTCA GGAGAGACAT	6660
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TTGGATTTCAT TTGTCACCTC CATATTGTA AGACTATTAT AAAACCCAAA TATGAAATAT	6960
TTATGAAATA CGAAAAAAATA ATATCGAGTA GGGGATAATC TCTAGCCCT CTCACACCAC	7020
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ATAATCCAAA CACGAAACCA GTCCACGTTT TTCAAGGACT GGTTTGATA TAGCACGTTT	7140
AAGTACCGAC TTCTGAGCTA CTATAGTAGA TTGAAACTAG AATAGTACAC CTCTACTTCT	7200

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AAAATATTGT TAGAAATCGA TTTGACTGTC CTGAACAATT CGTCCTATTC TTATTTCATT	7260
TTACTATAAT TGATAGTGGT CGCCCCAGCC AGATACCTTA TCTGCTATCC ATTTAGGAAC	7320
CCCTAACTTA AGCAATCCCC ATAATCGTCT CGATTTCTTC TTCCATTGCT TCCAGATAAT	7380
CACTCGTAGG CGAGTACGCA AGCGCTCATC TATGCTAGTG ACTATACTTT TCATATTAT	7440
AATTCATTCC TTTCGTTCA CTCAAGGCAC AACACAGAAT GAAAAAGTGT TGTGATCTT	7500
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TAAGTGAGTG GTACAGCCAC TACCTCGCAT ATTTTGTACAC ATCATTAAAC GGTACATAAT	7620
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CATTTTTCT GTATCTTTA TATTATCAGG ATTTTCACT AAGATTTGT CTGGATATGT	7800
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TCCAGCATT A TCTTTAGCAT TTAATTTAC AGTAATTCCCT GAACTAGGAA CTTCAGTAGC	7920
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ATAACATAAA ATTTGCATAA ATAGATTAGG GAAATCAAAG CAGCTTCTAG GAATGTTTA	8220
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TTTCTCCCAT ACTCCAAAGA TAGAGCTGAG AAAAGTATG AACACCTGG TGACCTGAC	8640
GCCACCATGT CTTGAACAAA TCCCGCTCAG CTTTGATTAA GTCTGATAGG GCTTGATGTC	8700
CCGCTGAGA CCAAACCTGA CCCAACATGA TAGAAAGACG AAGTCAAAG TCATACTCAA	8760
CCGCTTCAAT CGTATCATT AAAATATCTC TTACAGAAAGT GTATTTGTCT TGGTGAAGCA	8820
CGAAAACATA ATCCTGAGCT CCGACCTGTA GCACTGTCTG ACAATTGGA AAAAGAGTCC	8880
GCATCATATC TAGCCAAGAA GCCAGATTTT CCTGCTGAAA ATAAGAAAGA TGGCAATAAA	8940
CCAACTGAAT CTTTTTAAAAA ACTTGCGGTG CCTGTCCCTT GCCCTCAACC AGATAGGAAT	9000

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ACCAAGGGTT	TAGCGAACGA	GCCTGCTCCT	GCTGGGTCAA	AAGGGCAACC	AACTGCCTTT	9060
CACGCTCGCT	GAGCCCAGCT	TCCTCCAGCA	AAATCCACTG	CTGAGAAGCT	AAAGGGAGCG	9120
TGAGATAGCC	CTCTTTCTCT	ACTGGTTGGT	CTGAAATCCG	AGCCTCAGGA	AACCAGTCTT	9180
GTAGTTCTTT	TGCCCTCATG	TTCTAGCCCT	CCACTTTTG	GATGCACCAT	GAAACCAAAC	9240
TCTCAAGACG	TTCCAGATTC	TCAGTCATAT	GGAGATAGCC	CATAACCGCT	TCAAATCCCG	9300
TGGACATACG	ATAAGTCACG	ACATCTGCAT	TTTTAGCCTT	TGTGTGGCTA	TTGGTATTGC	9360
GGCCACGTTT	GTAGATTTCT	TCTTCTTTTT	CCGTTAGGAC	CTGCTCCTCC	AACATGAGAG	9420
CAATCAGGCG	AGCCTGAGCC	TTGGCTGACA	CGTACTTAGT	TGCTTCTTGA	TGGAGTTTAT	9480
TGGGTTGGT	CATACCTTG	AGGATGAGGT	GACGGCGAAT	ATACATAGAA	TACACCGCAT	9540
CCCCCTCAAA	GGCTAGCGCA	ATCCCGTTAA	TGAGATTGAC	ATCAATCACG	TGTCCACCTC	9600
ACTCCATCCT	TGGTATCAAG	GAGCTTAATT	CCTTGACTAA	CCAATTGGTC	ACGGATTTGG	9660
TCTGCTGTCG	CAAAGTCACG	ATTGGCACGC	GCCTCTGGC	GTTTTGAAAT	CAAGTCTTCA	9720
ATCTCTGCAT	CCAAAACCTTC	CTCAACAAAG	ACAATTCAA	AAATTTCTAA	CATATCTGCA	9780
AGAGCTTGCT	TGACACTTGC	ATCATAGTTC	CCTGAGTTGA	TCCATTGGC	CATTTCAAAG	9840
ACAACGTGTA	TACCGTTGGC	AGCATTTAAA	TCTTCATCCA	TAGCTGCTAC	AAACTTATCT	9900
TTAAAGTTT	GTAACTCTTG	GGCATCCACA	TTTCCTGTAA	ATGGTTGTTG	GTAAAGTATTC	9960
TTGAGATACT	TGAGATTGGT	CTCGGCATCG	CGAACTGCCT	TTTCCGTGAA	GTTGATAGGC	10020
TTACGGTAGT	GCTGGGTCGC	AAAGAAGAAA	CGAAGTACTT	GCCCATCAAG	AGTTTTAAGG	10080
GCATCGTGT	CCGTAATGAA	GTTACCCAAG	GACTTAGACA	TTTGACATT	GTCGATATTG	10140
ACAAAGCCAT	TGTGCATCCA	GTAGTTAGCA	AAAGCCTGC	CTGTTTAGC	TTCAGACTGG	10200
GCAATTTCAT	TGGTGTGGTG	TGGAAACTCT	AGGTCACTC	CACCAACGTG	GATATCAATG	10260
GTATCACCTA	AAATCTCTGT	CGACATGACT	GAACACTCAA	TATGCCAAC	CGGACGTCCA	10320
GGTCCCCAAG	GACTATCCA	AGAAATCTCA	CCTGGTTGG	AAGATTCCA	TAGAGCAAAG	10380
TCTACAGGAT	TTTCCTTACG	AGCCGTTCT	TCATCGGTAC	GACCTGAAGC	ACCTAGCTCC	10440
AAATCTTCCA	AGGTTTATT	AGCCAATTAA	GCATAGTTGT	GGGATTTTC	TACACGGAAA	10500
TAGACATCCC	CTTGACTCTC	ATAGGCAAAG	CCTTTCTCGA	TCAAGTCCTC	CACAAACGG	10560
ATGATGTCTG	CCATAAAACTC	CACTACACGC	GGATGGCGAG	TCGCAGGTTT	CACGCCAAT	10620
GCCGTCACAT	CCTCACGAAA	GGCAGCGATG	TACTTATCCG	CAACCTCCTG	AGGCGTGATA	10680
CCTTCTTCCC	TGGCACGGTT	GATAATCTTA	TCATCCACAT	CTGTAAAATT	GGAAATATAG	10740

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GCAACCTTAT	ACCCACGGTA	CTCAAAATAG	CGACGAATCG	TATCAAAAGC	TACCGTCGAA	10800
CGGGCGTTTC	CTACGTGGAT	ATAGTTGTAC	ACCGTTGCC	CACAAACATA	CATCTTGATC	10860
TTGCCGTCCT	CAATCGGGAC	AAATTCTCGC	AAATCACGAG	ACATGGTGTC	ATAGATTTA	10920
ATCATAAATC	ATAATCAGGA	AAGCTGAAAT	CCAAGAACAA	TTAGTTTCAT	CACTAAAAGT	10980
TCAAGTAAAT	TTCAGTCCGA	ATATCTCTAC	ACTTCGGAAT	CCCTTGCTCC	TTTCTCATTC	11040
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CCAGCTTTA	ATAAAATATA	TAGTCGGCTT	TCTGGATCTT	TCAGAGCTTC	AGCGACATAT	11340
CTATCCACAA	CTTCTCTCGA	TTCATGTTCC	TCTGAAAATG	CCTGAAATTT	TAATTGACTA	11400
ATTTGATCCT	GATACGAACT	ATCTGCTAAC	AAAACCAA	GATGGGAAAC	ATTTGCTAAC	11460
GGATAAGGTC	TTCTATCCTT	ACCTAACCAA	GTTTCTGTCT	CTTCATCCTC	GATTAGTCCC	11520
CAGTTACTGG	CAAAGTCAGG	ATGATTCTCT	AAAAAAATAC	GTTCTGTCTG	AAAAGTGACT	11580
GACCGAATGG	GGAAAGAACG	TGTTTCTCTC	TCAAAACTAG	TAAACAATGC	ACGCGCAATC	11640
CCCTGACGGC	GATGACCTGG	ATGAACCAGT	ATCGTCACTT	CTACATCTTG	GTCATCTGCA	11700
TAGACAGTTA	ATAAACCAAC	AAGTTCGCCT	TTTTCATAAT	AAAGGAAAAA	GGCGGGCATG	11760
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TGGCAACAGT	TAATTACTTT	TTTCGCCTCA	GATAGCTCCT	CTTGGCTTAA	CTTGTCTTCTT	11880
GCTTGAATCA	TATAGGTATC	CTCTACAAAC	CAGACGATCT	GTGACTGGCA	TCTTAGCCT	11940
GCTCGAGTTT	ATTGACATAA	TACTCTCGTT	TTTCTTCGAC	TTCGTGAATG	ACAGGCTCAT	12000
CTTTCTTACC	ATGAAGACGG	ACAATCTGG	CCGGAATACC	GACAACCGTC	ACGTCACTAG	12060
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GCCCATAAAC	TTGGGCATGG	GCTGATATGA	GGGCTCCCTT	TCGTACAGTC	GGATGGCGTT	12180
TGCCACAGTC	TTTCCCTGTT	CCCCGAGAG	TCACTCCGTG	ATAGAGAAGA	ACGCCTTTTT	12240
CAACAATCGC	TGTCTCTCCA	ATCACCAGAC	CAGAACCATG	GTCAATAAAA	ACACCTGAAT	12300
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TACGAGCTAA	TAGTTGAAG	CCGTGCTTCC	AGAGAAAATG	CGAGAGACGG	TGGGCCGCCA	12420
AGGCCTTGAC	ACCTGGATAA	GTCAGCAAAA	CCTCCAAAGT	GGTGCAGGCC	GCTGGATCAT	12480
TTTCTTTTAC	AATATCAATG	GTTTCGCGCC	ACCACCCAT	ACATTTCTCC	TTTTCTTATT	12540

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CTGAATCTT	TGATGTTCT	GTAAATTCTT	TCTTAGGTT	GTAATCCTT	TGATGACGTG	12600
GGCGGTGAGG	GCGCTCAGAC	TTTCACCTT	TTTCATCATG	CTCAGGTTT	GGCGGACGAG	12660
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TTCCCTCTTC	GTCTATATCA	ATCTAACAC	CTGTTTCAGC	GATAATCTG	TCGATGGTT	13020
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CGTAACGACC	TGTTTCCCCT	ACAGAATATT	GAGGGAAAGTT	ATAGTGGTGC	ATAAACGTT	13620
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CCTTGTCTTC	TGTAATTAAA	CGTCGCAC	CTGCGTGTTC	CATTTGTTCC	AAGATTCAG	13860
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CAGTCACTTG	GTCTTCACT	ACTTGAGTCG	CAGCTTCACG	GGCCAATTTC	TCTTCTACTT	13980
GAAC TGCC	TTGGAGGTCA	CTGTTGAGG	CTGCAATGAT	TTCAGCTTGC	AATTCAGCAT	14040
CCACGTGAAG	CAATTCCACT	TCTGTTTTT	CTTACCGAC	AGCAGCAACG	ATTTCTTCTT	14100
GGAAGGCAAT	CAATTCTTG	ACAGCTTCGT	GCCCTTTAAG	GAGCGCTTCC	AACATGATTT	14160
CTTCTGACAA	TTCTTGGCA	CCAGACTCTA	CCATGTTGAT	AGCGTGCTTG	GTTCCAGCTA	14220
CTGTCAATT	AAGAAGAGAT	TGCTCTGCTT	GTTCTGACT	TGGGTTGATG	ATGATTTGGC	14280

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CATCTACATA	TCCCACCTGT	ACCCCAGCAA	TTGGTCCGTC	AAATGGAATA	TCTGAAATAG	14340	
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TCATAAAAGCC	ACCAGGAAAC	TTCCCAGCCG	CATACATT	TTCTTCGTAG	TTGACTTGGA	14580	
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ACTCACCGTA	ACGTACGACA	ACAGATCCAT	TTGCTTGCTT	AGCAACCTGA	CCAGTCTCTA	14700	
CAATTAAC	ACGACCCGCA	AAAGTCGTTT	GAAACACTTG	TTTGCCATT	TTAATCCCCT	14760	
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CAAAGTAAAA	ATAGGAAACT	GACGAAGTCT	TCGATGAAGA	CAAGACAGTT	TATCTTTTT	14880	
ACACAGCTTT	TCGGCGTGT	TCAATTACAC	AAGATATT	GGACGGT	CG GCTGCCGAA	14940	
CATTCTGTA	GAAAATAGG	AAGGTGACGT	CGCACTCGAC	GAGT	GCTAGG	AAGCTTATCT	15000
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CAACTTTGTC	CAAGTCAGCA	ATAGTTTCAG	CAAC	CTTGTC	CTTAGTTAGA	TAAATAGCTG	16080

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CAAAGGCTGG	CAAACGAGTG	TAGTCTGCGT	CTGTCAAGCC	AGCGATAACGC	GCACGAAGTT	17460
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AACCTTGACC	ATTTCGATA	GCATCCAAGT	CACGGATTTC	ATCCAATT	TCAACTGCAA	17580
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GAAGAAGTGA	GCAAGAGCTT	GTCAAAACGA	TGTTTCAGC	TGGAATTGC	TCAAGAACAG	17700
CCAAGCTCTT	TTCGTAGTTG	TTGCCAGA	TGTTTTACC	ATTGACAATA	CCTACATAGA	17760
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CAACTGAGTC	AGAAATTCCC	AATTCAACAA	GTGAACAGAT	CATTCCAAGT	GAETCCAAAC	22980
CACGGATTTC	TCCTTTTTG	ATTTTGTAGT	TATCAGCGAT	ACGAGCTCCT	GGAAGAGCCA	23040
CCATGACCTT	GATCCCAGCA	CGCACATTG	GGGCACCCACA	AACGATCTGA	CGCTCTTCTT	23100
CTTCGCCAAC	GTTAATCTGA	CAAACATGGA	GGTGAGTCTC	TGGCACATCT	TCGCAAGACA	23160

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AGACCTCAC	GACGACAATT	TTTGAGAGAC	CAGCAGCTGG	TGATTCGACA	CCCTCTACCT	23220
CGATCCCTGT	AGTTGACATT	TTTCAGCCA	ACTCTTGTGA	TGGCACATCA	ATGTCCACCA	23280
ATTCTTTAA	CCATTTATAA	GATACAAGCA	TAATTTAGTT	CTCCAGAATG	ACAGTTGTCA	23340
CTCTAGTTCT	TTTCCTTCC	TATCATTCA	ATAGAAGAAT	CCTCTTCTTA	CCTTAATTTC	23400
TTTCTCAGTA	ACCAATCCGT	ATCTACTTTT	TGACCAACCA	TAAAATGATG	TTGGCTAAAT	23460
TTTTCAAAAC	CATATCGGTT	ATAAAACGCT	TGAGCTTTG	TATTATGCTC	CCAAACACCT	23520
AGCCAAGCCC	AAGAAAAACT	ATTTTTGTA	GCAAGTTCAA	GTGCGAATT	AAACAGTTGC	23580
TTACCTAGTC	CAAATCCTTG	GAATTTTGT	AGCACATAGA	GACGTTGAAT	TTCAAAAGCG	23640
TCCTCTAATT	CTCTCTCAGT	TTGAGCACTT	CCCCAGTTGA	CTTTGAGAAA	ACCAGCTATC	23700
TCCTCCTCAT	GCATAATGAA	ATAGTTTCA	GAGTCAGGAT	TTCCCAACTC	AGTTGACAAA	23760
GTTTTCAGAC	TATAAGCCTC	TTCAAGTAT	TCCTGTAACT	GCTCTTCCGT	ATTATCATA	23820
GCAAAGGTTT	CACGAAAGGT	TTGTTGGCA	ATTTTAGCCA	ACACCTCAAC	ATCTGCCATT	23880
TCTACTTTTC	TAATCATTAT	TTAAACTGTT	CTGAGAAGCG	GACATCTCCT	TGGTAGAATC	23940
CACGGATATC	GTTGATTCCA	TAACGGAGCA	TAGCTACACG	CTCTTGTCCA	AGACCAAAGG	24000
CAAAGCCAGA	GTATACAGTC	GCATCGATAC	CACTCATTC	AAGGACACGT	GGGTGAACCA	24060
TACCGGCC	CATAATTTCG	ATCCAACCTG	TTTCTTACA	TACATTACAG	CCTTCTCCAC	24120
CACACTTGAA	GCAAGAAACA	TCCACCTCAA	CAGATGGCTC	TGTGAATGG	AAGTAAGATG	24180
GACGCAAACG	AATTTGACGC	TCTTCACCAA	ACATTTTTG	GACAATCAAC	TGAAGCGTTC	24240
CTTGAAGATC	AGCCATAGAG	ATATTTTCC	CAACTACCAA	GCCTTCGATT	TGGTGBAATT	24300
GGTGACTGTG	GGTCGCATCG	TCCGTATCGC	GACGGAAGAC	ACGCCCTGGC	GAGATCATCT	24360
TCAAAGGACC	TTTAGAAAAA	TCATGGGCAT	CCATAGCACG	CGCCTGAAC	GGAGACGTGT	24420
GGGTACGGAG	CAAGATTCT	TCAGTGATAT	AGAAAGTATC	CTGCATATCA	CGAGCTGGGT	24480
GGTCTTTGG	AAGGTTCATA	CGTTCAAAGT	TATAGTAGTC	TTGCTCCACT	TCAAAACCAT	24540
CCACGACTTG	ATAACCCATA	CCGATGAAGA	TATCTTCGAT	TTCTTCACTG	GTGGTGTC	24600
AAACGTGACG	GTGACCAGTC	GCAACTGGAC	GACCTGGAAG	CGTCACATCT	ATACTCTCGC	24660
TAGCCAGTTG	AGCCGCGACT	TTCTTTCTT	CCAAGAGCTT	AGCTGTTCT	TCAAAAGCAG	24720
CAGTCAAGAC	ATCACGAGCT	TCATTGACGT	GTTCGGCGAT	GATTGGACGC	ATCTCAGCAG	24780
AAACATCTT	CATCCCTTG	AGGATTCAG	TGAGCGAAC	CTTTTACCA	AGGACAGAGA	24840
CACGCAAATC	TTGCATCTCT	TTTCATTTC	CAGCAGTAAT	CTGCTTCAAG	CTAGCCAGCG	24900

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TTTCTTCGCG AAGCGCTTT AATTGTTCTT CAATAGTTGA CATATTCCT CCATCAGTCT	24960
CTCGTAGATA AAAAGAAAAC CACATGCCAA AAACCTCCACT CGGAGCGTTG ACACGCGTA	25020
CCATCCGTTT TCATCTGACA AGTCAGACCT TCATTTCTAA ATCCATGCAG AAGTGAATT	25080
ACCCAGCTTT CATATAGAGA GCTTGCAGTC ACGGCTCTCC TCCCCTGATAT ACTTCCCTTG	25140
GGCTACTAGT CTTTCAGATT CCTATTCAAT TACTACTTAG TTTATCAGAT TTTTACCAATT	25200
CTTGCAAGAC CTATCTACT TCTGCTTGTT AGCTTATTCT TATCTAAATT TATATAAACc	25260
TTATCTAAAT TAACTATTAA TAATTTTGTA AACAAAATTAA AATTAATTGA CACTCCCCTA	25320
TAAAATAAAG AAGTTTAGAA TTTAATGTCT TCCAAACTTC TTTATTCCAT ATTTAATGAA	25380
ATGCCACCTT AACCGTGATA ATAGCTAGTC ATCAATAAAA AACTATTGA ATAAGGATT	25440
TCCATTTGAT TCAATCACTT CTTTATACCA AGTAAAAGAC ATTTTCTTAT ATCGATTTAA	25500
TGTACCACTT CCATCATCGT TTGATCAAC ATAAATGAGA CCGTACCTT TAGAAAGTTG	25560
TGCAGTGGAC ATAGAAACAC AGTCAATACA TCCCCAAGAC GTATAGCCC TAATTTCAAC	25620
ACCATCCTGT AGAGCTTCAG CAACCTGCAA TAAATGTTCT TTCATATACT GAATTCTATA	25680
ATCATCTTGG ACGGTTAAGT TATTAAGTTTC ATCTTTTATT AGTTGATCTT TAGCACCTAA	25740
TCCATTTCT ACTATAAATA ATGGGATTTG ATAACGGTCA TAATATCTAT TTAAAATTAT	25800
ACGTAGTCCA ATTGGATCAA TTTGCCATCC CCACTCTGAA GACTCTAAAT AAGGATTTAC	25860
TAAACCACCA ATAATATTCC CTTCTCCTGA ATTATACTGT GTTGGAAAGAG CAGATTGAGT	25920
CACACTCATG TAATAGCTAA AGGATAAAAA ATCTACGGTA TAATTTTTA ATAACCTCTGC	25980
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CGGATAATAA CCTCTAACAT GCACATCTGA AAATAGATAA TTTAGATTCT CATACTCATG	26100
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ATGAATCATT CTCCTATCAA CCCATCCATG ATATTTCTT GCTAAATATA ATGGAGTCTC	26460
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ACTCCATGCA ATAGAAGTAC GAAAAACATT AAAGCCCATT TCAGAAAACA AGGATATATC	26640
TTCCTTATAT TTATGATAAA AATCAATACC TATCAATTAA AAGTTATCTT CTGTAGGATT	26700

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TTCTGTTGCT TCTCCTAATC CACCTTGCGG TAACACATCC TGAACGTATA AGCCCTTACC	26760
ATCTTCATTA TATGCTCCCT CTACTTGATT AGCTGCAACA GCTCCACCC AAAGAAAATC	26820
ATCTGGAAAA ATGGTCATAA CTTTCCTCCA TTATAATATT ACCAGTAATT CCTTACAATG	26880
CTCGATTGTC TGATTATTAG GTAATACTAA TACATCTAGA AAATCATTGG TATTGTTAC	26940
AATTACTGGT GTAACTGTTT CGTAGCCTTT AGTCTTGATT AAATTCAGT CCATTCAAA	27000
AATCAACTGA TTTTGAAAAA CTCTGCTCTCC TTCTTCTACA TGACTAATAA AACCTTGACC	27060
TTTTAGCTCA ACAGTATCTA ATCCAATATG AATTAGTAAC TCAACACCC CATCACTCTT	27120
CAATCCAATT GCGTGCTTAG TCAGAAAAAT ATTGTAAATT TTCCCATCAA ATGGTGCATA	27180
AACCTTACCT TCACTTGGGA TAATCGCTAC TCCGTCTCCA ATTAGTTTAT CTGAAAATGT	27240
TTTATCCTGG ACATCGCTTA ACAGGAATGAT TTCTCCTGAT ATAGGAGAAA ATATCATT	27300
TTTATTTGAA ACTCCAGCTT CAACTTCTAA ATTGCTAGAA CTCTCTTCTT CATCGATTCC	27360
AAATATATAA GCTAATACAA AGGTAATAAC AACCGAAATG ACCGCCACAA TTAAAGCATT	27420
TACAATATTG GATGGCACAT CAGAATAAAT AAATTGAGGC AACGCTATCA AAGATGGAC	27480
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AATCATAGCT GCATAAAGCG GTTTTTTATA TTTTAAAGTC ACACCATATA ATGCAGGTT	27600
GGTAATCCCT GCAAGTAAGG CTGAGAAACC TGCTGCAAAA GCAATTGTT TTGTATTATT	27660
ATTTTTACTC TTTAATGCAA CAGCCATCGA AGCAGCCCT TGAGCTAAGT TTGACCTAA	27720
CATTGCTGGA AGAATTAATA CGTCTGGAGT AGCAATAGAT GCCGCCACAA AAATAGGTGC	27780
AAAAGCCCAA TGCAATTCCAG TCATAACAAT AAATGGCATA ATAGCACCAA GAATAGCTAA	27840
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AATTACTCCA ATAGGTCGCA CTACAACAA GGCAATACAG CTTGATACTA ATAATACTAG	27960
CGTAGGTTGC AAAAAGCTCT TAGTAATAGC TAGTGTAAAT TTAGCAATTA TTTTTCAAT	28020
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TGGATGGAGA AGTACACCTG CTACAGACAT AGCTAATGTA GATGTTACTT TTAATTGTTG	28200
TGATGCAGAA TAAGCTAATA ACAGCGGTAA GAAATAATAT GGAGCATCCC CAAAAAAATGT	28260
CAAAAAAGCA ATAGTCTGAG AATCTGATTG CAATATACCA AGCATTGGTA AAATGATTAC	28320
CAAGACTTTC AACATACCTC CCCCTAACAT TGCTGGAATG ATTGGAGTCA TGGAACCAGC	28380
GATATACTCA ATGATTCTTT CTAAAATATT CCCTTGTC CCTTGAACAA CTGAATCGGA	28440

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TTCAAAATTG CCAAGTTAA CGAATTCTTT ATAATAATTA GCTACATCAT TACCAAGTAT	28500
AATTTGATAT TGTCCATTCT TTTTCATAAT ACCTATTACA CCTGGTATCT TCTTCACATC	28560
ATCATCATTG ACTAAATTAA CATCTTTAA TTCTAATCTT AAACGTGTTA CACAATGGGT	28620
AACTCTATTG ACATTTTTT CACCTCCAAT TACATCGAGG ATTTTTGTA CCGTATCTTT	28680
ATAACTCATG GTATTCTCCT ATTCTATTAA TCTAAATTAA TTGTTAAGCG ACGAATATGA	28740
GCCATCAAAT AAACTAATTC ACTAGAAGTC AGCAAATAAT TGTACTCCGT TTGTATAAAC	28800
ATTGCTACCT GTTCACCACA TTCATATTCT CTAGGATATT TATTTTCAT TAATGCTAAC	28860
AAGTCTTCAT CATCATCGTC GG	28882

(2) INFORMATION FOR SEQ ID NO: 141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 12835 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 141:

GCCTATGTCT TTTTCAAAAA AATGCTTGAC TTGAGACGGG AACTAGGGAA GTCTAAAGGC	60
GGAAGGCATT GATTTATACT CTTCGAAAAT CTCTTCAAAC CACGTCAACG TCGCCTTGGA	120
TTATATATGT AACTGACTTC GTCGATGCTT ATCTACAACC TCAAAGCAGT CCTTTGAGCA	180
ACTTGCGGCT AGTTTCCTAG TTTGCTCTTT GATTTTCATT GAGTATTATA TTACTTTCTA	240
TTTGTAGGAG GTGGCTTATG AAGATTCCTC TCTTAACCTT TGCAAGGCAT AAATTTGTTT	300
ATGTCTTGCT TACTTTGCTT TTTCTTGCTT TGTTTATCG TGATGTTTG ATGACTTATT	360
TCTTTTTGA TATTCAATGCG CCCGATCTAG CTAATTCGA TGGACAAGCA ATTAAAAATG	420
ACTTATTAAA ATCAGCATTA GATTTCGTA TTCTCCAGTT CAATCTAGGT TTTTATCAAT	480
CATTTATTAT TCCAATCATC ATTGTTTGCG TAGGTTTCA ATATATTGAG CTGAAAAATA	540
AAGTTTTACG ATTGAGTATT GGAAGAGAAAG TGAGTTATCA AGGGTTAAAA AGAAAGTTGA	600
CTTTGCAAGT TGCAAGTATC CCTTGTTGA TATATTAGT GACTGTGCTG ATAATTGCAA	660
TTATAACCTA TTTCTTTGGG ACTTTTCTC CTCTTGGATG GAATTCTCTA TTTTCTGATG	720
GAAGTGGTTT ACAAAAGACTC CTAGATGGAG AGATAAAAAG CTATTGTT CTTACTTGTG	780
TCCTACTAAT CGGTATTTTC ATCAATGCAA TCTATTAAAC ACAAATAGTT GATTATGTGG	840
GGAATGTGAC TCGTTCGGCA ATCACCTATT TGATGTTCT TTGGCTTGGT TCTATGCTGC	900
TTTATAGTGC CTTGCCTTAC TATATGGTTC CTATGACGAG TTTGATGCAA GCTAGCTATG	960

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GGGATGTAAG TTTGATGAAA CTCTTTACTC CTTATATCCT TTATATTGTC CCTTACATGG	1020
TGCTTGAAAA ATATGAAGAT AATGTTAAG AATTTAACCA ATATTTGCT AAATAGAAAG	1080
ATTGTTTAC TACTCGTAT AGTCTGATG ATGATTTGA TAAACCACCT ATTGTCAACA	1140
GCGGTTCAAA AGCAGGATGC TGTTATCTT TTCAAGAGAG AATTGATTTC AATTTTTCC	1200
TATAATGACT ATTCTGAAGC GAATTTAGAA ATCCCCAAC TATTGTTAAA CCTTCGCTT	1260
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CACTTGATTC GCTATCAATC AAGCTCCTTT TTCGATTATA CAAGGAAACG ATTGGTTGTC	1380
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CTACTGTCTT ATCTGATAGC ACTGATTAGT CGGGGCGCTG GTTTTCCCTT TTTTCTCTAT	1560
TTTTTAGCAT TTGTGGGACA AGAATGGATG ATGGATCATA TTGTAACAGT GTATTAGTA	1620
CTCTTAAGTT TATTAGTTAT GTTGATTGTT AGTCGCTTGG AAGAGAAATT TAAGAAAGGA	1680
TAAACGATGA GACTTGAAT TATAATGGA CAGAAAATT ATGGGAAAG ACCTATTTA	1740
AATCAGTTGA ATTTGGTGT TCAATCAGGA AAAATTATG GACTTAAAGG TGATAATGGA	1800
TCTGGCAAGA CGGTTCTTT AAAGATACTT GCTGGTTATA TTAAGCTTGA CAAAGGAAAA	1860
GTTCTTCAAG ATGGTAAAGT TTACGGGGTA AAAATCATT ATATTCAAGA TGCAGGAATT	1920
TTAATTGAAA AAGTCGAGTT TTTATCTCAT TTATCCCTGA GAGAAAATT GGAACTGTTA	1980
AGGTATTTT CATCTAAAGT TACGGAAAAA AGAATTGCCT ATTGGATTCA ATACTATGAT	2040
TTACAGGAAT TTGAAGACAT TGAATACCGT CATTATCCT TAGGAACAAA GCAAAAATG	2100
GCCTTGATTC AAGCCTTAT TTCCCTCTCCT TCTATACTCT TTCTCGATGA ACCTATGAAT	2160
GCTTGGATG AGAAGAGTGT GAGGTTAACC AACAGGTCA TTTTATCTTA CCTGAAAAAA	2220
GAAAATGGTC TGGTTATCCT GACGTCGCAC ATATCGGAAG ATATTCAGA CCTTTGTACA	2280
GATGTATTAG TTGTCGAAAA TGGACATATA CAAATGTAAA GGATATACAA TCCTAGGAGA	2340
TGGCTTATGG CACATCTAAA ATCATTTATT ACACGATATT CCAAGGTTA TATTGGTTA	2400
GTTCTGCTGA TCTGGCTGTC TTTCTTCTTT ATCCCTGGG ATAAACCACT TCTGGGGATA	2460
AGGATTGACA TCTTCATCAT ACAGAAAATC TTGCTAGCTT TTGGAATTCT GTCCATTCTC	2520
ATGGCCTTGC TGTCCAAGAA AGTCAGTCTC TTTGTTTTG GACTGATTG CTGTCTTCT	2580
CTTTGGATTA ACTTATTAT CACATTTGCC ATTTGCCGA TTTTGGCAA TTAAACAGTC	2640
ATAAAAGTCG GAGAGGTTAG CTTGAAAATC AACCTCTTT TCCTTTCAA AATGGGGATT	2700

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CTTCCTTGAA	AATAATCAGT	AATTGTGCTA	AAATTAAAGG	AACATTCTAA	AATATTCGGA	2760
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AGAAATCCGT	CGTCTGGAAA	AGATGGCTGA	CAAGGTTTC	AAATACGAAG	ACCAAATGGC	2880
TGCTTGTACT	GACGACCAAC	TAAAAGCAAA	AACAGTTGAA	TTAAGGAAC	GTTATCAAAA	2940
TGGAGAATCA	CTGGATTCAT	TGCTTACGA	AGCATTGCG	GTTGTCCGTG	AAGGTGCCAA	3000
ACGTGTCCTA	GGTCTCTTCC	CTTATAAGGT	TCAGGTCATG	GGGGGGATTG	TTCTTCACCA	3060
TGGTGACGTG	CCAGAGATGC	GTACAGGGGA	AGGGAAAACC	TTGACTGCGA	CCATGCCGGT	3120
ATACCTCAAT	GCCCTTCAG	GTAAAGGGT	TCACGTAGTT	ACGGTTAATG	AATACCTGTC	3180
AGAACGTGAC	GCGACTGAGA	TGGGGAATT	GTACTCTTGG	CTTGGTTGT	CAGTAGGGAT	3240
TAACTTGGCT	ACCAAATCTC	CAATGGAGAA	AAAAGAAGCC	TATGAGTGTG	ATATTACTTA	3300
CTCAACTAAC	TCAGAAATCG	GATTGACTA	CCTTCGTGAC	AACATGGTCG	TTCGCGCCGA	3360
AAACATGGTA	CAACGTCCGC	TTAACTATGC	CTTGGTCGAT	GAGGTTGACT	CTATCTTGAT	3420
TGACGAGGCT	CGTACACCTT	TGATTGTATC	AGGTGCCAAT	GCGGTTGAAA	CCAGTCAGTT	3480
GTATCACATG	GCAGACCACT	ATGTAAAATC	TTTGAACAAA	GATGACTACA	TCATCGATGT	3540
GCAGTCTAAG	ACTATTGGTT	TGTCTGATTC	AGGGATTGAC	AGGGCTGAAA	GCTACTTCAA	3600
ACTTGAAAAC	CTCTATGACA	TCGAAAACGT	GGCTTGACT	CACTTTATCG	ATAACGCCCT	3660
TCGTGCCAAC	TACATCATGC	TTCTCGATAT	TGACTATGTG	GTGAGCGAAG	AGCAAGAAAT	3720
CTTGATTGTC	GACCAATTAA	CAGGTCGTAC	CATGGAAGGT	CGTCGTTATT	CTGATGGATT	3780
GCACCAAGCT	ATTGAAGCCA	AAAAGGTGT	GCCAATCCAG	GATGAAACCA	AGACATCTGC	3840
CTCAATCACG	TACCAAAACC	TCTTCGTAT	GTACAAGAAA	TTGTCTGGTA	TGACGGGTAC	3900
AGGTAAGACT	GAGGAAGAAG	AATTCCGTGA	AATCTACAAC	ATTCTGTGTTA	TTCCAATCCC	3960
AAACAAACCGT	CCTGTTCAAC	GTATTGACCA	CTCAGACCTT	CTTTATGCAA	GTATCGAATC	4020
TAAGTTAAA	GCCTGGTGTG	AAGACGTTAA	GGCTCGTTAC	CAAAGGGTC	AACCTGTCTT	4080
GGTTGGTACA	GTAGCGGTTG	AAACTAGTGA	CTACATTCT	AAGAAATTGG	TTGCAGCTGG	4140
TGTTCCCTCAC	GAAGTCTTGA	ATGCCAAAAA	CCACTATAGA	GAAGCCAAA	TCATCATGAA	4200
TGCTGGTCAA	CGTGGTGCCG	TTACCATCGC	AACCAACATG	GCCTGGTGTG	GTACCGACAT	4260
CAAGCTTGGT	GAAGGTGTTG	GTGAACCTGG	AGGACTTGT	GTTATTGGTA	CAGAACGTCA	4320
TGAAAGTCGT	CGTATCGATA	ACCAGCTTCG	TGGACGTTCA	GGTCGTCAAG	GAGATCCAGG	4380
TGAGTCACAA	TTCTACCTAT	CTCTTGAAAGA	TGATTTGATG	AAACGTTTG	GTTCTGAACG	4440
CTTGAAAGGGA	ATCTTGAAAC	GCTTGAAACAT	GTCTGAAGAG	GCCATTGAGT	CTCGCATGTT	4500

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GACGCGTCAG	GTTGAAGCAG	CTCAGAAACG	TGTCGAAGGA	AATAACTACG	ATACCCGTAA	4560
ACAAGTCCTT	CAATACGATG	ATGTCATGCG	TGAACAACGT	GAGATTATCT	ATGCTCAACG	4620
TTACGATGTC	ATCACTGCAG	ATCGTGACTT	GGCACCTGAA	ATTCAGTCTA	TGATCAAACG	4680
CACGATTGAA	CGTGTGTTG	ATGGTCATGC	GCCTGCCAAA	CAAGATGAAA	AACTAGAGGC	4740
AATTTTGAAAC	TTTGCTAAGT	ACAACCTGCT	TCCTGAAGAT	TCTATTACGA	TGGAAGACTT	4800
GTCAGGCTTG	TCTGATAAGG	CCATCAAGGA	AGAGCTTTTC	CAACGTTCT	TGAAGGTTTA	4860
CGATAGTCAG	GTTTCAAAAC	TACCGGATGA	AGAAGCAGTT	AAAGAATTCC	AAAAAGTTTT	4920
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TAACGCGGTT	GGACTTCGTG	GCTATGCTCA	GAACAACCCCT	GTTGTTGAGT	ATCAGGCAGA	5040
AGGTTTCCGT	ATGTTTAATG	ATATGATTGG	TCGATTGAG	TTTGATGTGA	CACGCTTGAT	5100
GATGAAAAGCA	CAAATTCAATG	AACAAGAAAG	ACACACAGGCA	GAACGTCATA	TCAGTACAAC	5160
AGCGACTCGC	AATATCGCTG	CTCACCAAGC	AAGTATGCCA	GAAGATTTGG	ATTTGAGCCA	5220
GATTGGACGC	AATGAACCTT	GCCCATGTGG	TTCTGGTAAG	AAATTTAAAA	ACTGTCACGG	5280
TAAAAGACAA	TAAAATGAGA	TAGTTTAGAG	GCGGATATCT	TGTGAAAAGT	AAATTTTAC	5340
TGGGTATCCG	TTTGCTTTAT	AAGGAGATGA	GTTATGGTAT	TTACAGCAAA	AAGCTCTAAA	5400
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TCACAGCGAG	ATCAAGAGCT	AGAACGCCATT	ATACGTGGAG	AAGACCAGCG	AATTCTCTTG	5520
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GATTTGATT	CTTACATGGC	AGTTGGTGCC	CGTTCAGTTG	AAGACCAGCA	ACACCGCTTT	5880
GTGGCAAGTG	GGGCAGGATT	TTCTACTGGT	TTTAAAAATC	CAACCTCTGG	AAATCTCAAT	5940
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GAGAAAATGG	GCTTGGAAAA	TCCTTTATC	ATCATTGATA	CCAATCATGA	CAATTCTGGT	6180
AAGCAGTATA	TTGAACAGAT	CCGAATTGTC	CGCCAGACCT	TGATTAACCG	TGCTTGGAAAT	6240

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GAAAAAAATTA	AGCAGTTCGT	TCGTGGTTT	ATGATTGAGT	CTTATCTGGA	AGATGGTCGA	6300
CAAATGAGC	CAGAAGTATT	TGGTAAGTCT	ATCACAGACC	CTTGCCTGGG	TTGGGATAAC	6360
ACAGAAGCTC	TTGTCAGAGA	AATTTACAAA	ACGTTAGGAG	AATAAGATGG	CATTTATTGA	6420
AAAAGGTCAA	GAAATCGATA	TGGAAGTCAT	CAAGGCTGAA	ACCCAATTGT	CTGCGGAAGC	6480
CTTGAGACTC	AAGGAAAGCC	GTGACAGGG	ATTGGCAGAT	ATTATTCAG	GGGAAGATGA	6540
CCGTATTCTC	TTGGTGATTG	GTCCTTGCTC	TTCTGATAAT	GAAGAGGGCG	TCTTGGAAATA	6600
TGCTCGCCGT	TTATCTGCCT	TGCAAAAGAA	GGTAGCGGAT	AAGATTTCA	TGGTCATGCG	6660
CGTGTATACT	GCTAACCTC	GTACCAATGG	AGACGGCTAT	AAAGGATTAG	TTCACCAGCC	6720
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CCGCGTGATT	ACAGAGACTG	GTTTGACAAC	GGCAGATGAG	ATGCTTTATC	CGTCAAATCT	6840
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AGGAAATTG	GGTGTATGT	TTAACGCCAT	CTATGCTGCT	CAAACACAAGC	AAACCTTCCT	7020
TTATCATGGG	CAGGAAGTTG	AGACATCAGG	TAATCCTTG	GCCCAGTTA	TCCTCCGTGG	7080
AGCAGTCAAC	GAGTATGGCA	ATTATATGCC	GAATTACTAC	TATGAAAATC	TACTCCAAGC	7140
CATTGAACGC	TATGAAACCA	TGGGACTTGA	AAATCCTTT	ATCCTCATTG	ACACCAACCA	7200
TGATAACTCA	GGCAAGCAAT	ATATGGAGCA	GATTCGAATT	GTTCGCCAGA	CCTTGCAGAA	7260
TCGTGATTGG	AATGAGAAAA	TTAAAAAGAC	GGTCGAGGA	TTTATGATTG	AATCTTACCT	7320
AGCAGATGGT	CGTCAAAACC	AACCAGAGAT	CTTTGGTTGC	TCTATTACTG	ACCCTTGCCT	7380
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GAAAAGGATG	GAGTTGGG	ATCTCAACTC	CTTTTGATGA	GAATGATAGT	TGGACACGGA	7500
ATTGACATCG	AAGAATTGGC	TTCGATAGAA	AGCGCAGTTA	CACGACATGA	AGGATTTGCT	7560
AAGCGTGTAC	TGACCGCTCA	GGAAATGGAG	CGCTTCACCA	GTCTCAAAGG	ACGCAGGCAA	7620
ATAGAATATT	TAGCTGGTCG	CTGGTCGGCT	AAGGAGGCCT	TTTCCAAGGC	TATGGGAACG	7680
GGCATTAGCA	AGCTCGTTT	TCAGGATTG	GAAGTCTTGA	ACAATGAACG	TGGGGCGCCT	7740
TATTTAGTC	AGGCACCATT	TTCAGGAAAG	ATTTGGCTGT	CTATCAGCCA	CACCGATCAG	7800
TTTGTGACAG	CCAGTGTCA	TTTGGAGGAA	AATCATGAA	GCTAGTCCAC	ATAGACCAAC	7860
CAAGGCTCTG	ATTCATCTGG	GAGCTATTG	ACAAAATATT	CAGCAAATGG	GGGCTCATAT	7920
CCCTCAAGGA	ACGCTCAAGT	TGGCTGTGGT	TAAGGCCAAT	GCTTATGGTC	ATGGAGCTGT	7980
TGCCGTTGCC	AAGGCAATTC	AAGATGATGT	TGATGGCTTT	TGCCTTTCCA	ATATCGATGA	8040

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AGCCATTGAA	CTCAGACAAG	CTGGACTCAG	CAAGCCAATC	CTCATTCTAG	GAGTTTCTGA	8100
AATCGAAGCT	GTTGCTCTAG	CTAAAGAATA	TGACTTCACC	TTGACAGTGG	CTGGACTGGA	8160
GTGGATTCAA	GCACTCTTAG	ATAAGGAAGT	GGACCTAACT	GGATTGACAG	TCCACCTCAA	8220
GATTGATTCA	GGGATGGGAC	GGATTGGTTT	TAGAGAGGCA	AGTGAGGTTG	AGCAGGCTCA	8280
AGATTGCTC	CAACAAACACG	GTGTTTGTGT	TGAAGGAATC	TTTACCCACT	TTGCTACTGC	8340
TGATGAGGAA	TCAGATGACT	ATTTAATGC	CCAGTTAGAA	CGGTTTAAAA	CTATTCTAGC	8400
TAGTATGAAG	GAAGTTCCAG	AGCTGGTTCA	TGCTAGCAAT	TCTGCAACGA	CTCTTGGCA	8460
TGTAGAGACT	ATTTCAATG	CGGTTCGTAT	GGGAGATGCC	ATGTATGCC	TCAATCCAAG	8520
TGGAGCGGTC	TTGGATTGTC	CTTATGATTT	GATACCGGCC	TTGACCTTGG	AGTCTGCTCT	8580
GGTTCATGTC	AAGACAGTTC	CAGCTGGAGC	TTGCATGGGC	TATGGAGCAA	CTTATCAAGC	8640
GGATAGCGAG	CAAGTCATCG	CGACCGTGCC	AATCGGGTAT	GCAGATGGAT	GGACAAGAGA	8700
CATGCAAAAT	TTCTCTGTCT	TGGTAGATGG	CCAAGCTTGC	CCAATTGTCG	GCAGGGTTTC	8760
GATGGACCAA	ATCACTATTC	GATTGCCTAA	GCTTTATCCG	CTAGGAACCA	AGGTAAACCTT	8820
GATTGGCTCC	AATGGGGATA	AGGAAATCAC	TGCAACTCAG	GTAGCGACCT	ACCGCGTAAC	8880
CATTAACTAT	GAGGTGGTTT	GCCTCCTCAG	CGACCGTATT	CCGAGAGAAAT	ATTATTAGAA	8940
AAGAAAGGAG	TGGAGCATGA	ATCTACATCA	ACCCCTTGAT	GTCTTGCTG	GTGTGGGACC	9000
AAAGTCAGCA	AAAAAATACG	CCAAACTAGG	AATTGAAAAC	TTGCAAGATC	TCTTGCTCTA	9060
CTTTCCCTTC	CGTTATGAAG	ACTTCAAAAC	CAAGCAGGTG	CTGGAGCTGG	AAGACGGTGA	9120
GAAGGCAGTT	CTTTCTGGTC	AGGTAGTGAC	TCCTGCTAGT	GTCCAGTATT	ATGGTTCAA	9180
GCGCAATCGC	CTGCGTTTTA	GTCTCAAGCA	GGGAGAGGTC	GTTTTTGCGG	TGAATTCTT	9240
TAACCAGCCC	TATCTGGCTG	ATAAAATAGA	GTTGGGAGCA	ACCCCTGCTG	TCTTTGGAAA	9300
ATGGGACCGC	GCTAAGGCTA	GTCTGACTGG	GATGAAGGTT	CTGGCTCAGG	TAGAAGATGA	9360
CCTCCAGCCT	GTCTATCGTC	TGGCTCAGGG	AATCAGTCAG	GCCAGTCTGG	TCAAGGTCAT	9420
CAAGACGGCT	TTTGATCAGG	GACTGGACCT	CTTGATAGAA	AAAAATCTGC	CCCAGTCTTT	9480
ACTAGACAAA	TACAAACTCA	TGTCCCGTTG	TCAGGCAGTC	CGTGCTATGC	ATTTCCTAAA	9540
GTATTTGGCA	GAATACAAGC	AGGCTCTTCG	CCGTATAAAG	TTTGAGGAAC	TCTTTTATTT	9600
CCAAATGCAG	CTGCAGATGC	TCAAGTCTGA	AAATAGAGTT	CAGGGAAGTG	GTCTGGTTCT	9660
GAATTGGTCT	CAGGAAAAAG	TGACAGCAGT	TAAAGTAAGT	CTTCCTTTG	CCCTGACCCA	9720
AGCTCAGGAA	AAGAGTTGC	AGGAAATTTC	AACTGATATG	AAGTCCGACC	ACCACATGAA	9780

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TCGTCTCCTA	CAAGGGATG	TGGGGAGTGG	AAAAACGGTA	GTCGCTGGCT	TGGCCATGTT	9840
TGCGGCAGTG	ACAGCAGGTT	ATCAGGCTGC	CCTAATGGTA	CCAACAGAAA	TCCTCGCAGA	9900
GCAACACTTT	GAGAGTTAC	AGAACCTTTT	TCCAATTG	AAACTGGCTC	TCTTGACAGG	9960
TTCCCTGAAA	GCTGCAGAAA	AGAGAGAAGT	CTTGGAGACC	ATTGCCAAGG	GTGAGGCTGA	10020
TTTGATTATA	GGAACTCACG	CTCTGATACA	AGATGGGGTG	GAGTATGCTC	GTCTTGGTT	10080
GATTATTATC	GATGAGCAGC	ACCGTTTGG	TGTAGGGCAA	AGGCCTATT	TACGGGAAAA	10140
AGGTGACAAT	CCAGATGTCC	TCATGATGAC	GGCGACTCCC	ATTCCACGGA	CGCTTGCCAT	10200
CACAGCCTTT	GGAGATATGG	ATGTTCCAT	TATCGACCAG	ATGCCAGCAG	GTGCGAAGCC	10260
TATTGTGACG	CGCTGGATCA	AACATGAGCA	ACTACCTCAG	GTCTTGACTT	GGTTAGAGGG	10320
GGAAATTCAA	AAAGGTTCCC	AAGTCTATGT	CATCTCTCCT	TTGATTGAAG	AATCAGAAGC	10380
TCTAGATTG	AAAAATGCCA	TTGCCTTATC	AGAGGAGTTG	ACGACTCATT	TTGCAGGCAA	10440
GGCAGAGGTG	GCTCTTCTAC	ATGGTAGGAT	GAAGAGTGAC	AAAAAAGACC	AGATCATGCA	10500
GGATTTCAG	GAGAGAAAAGA	CGGATATTCT	GGTTTCGACG	ACGGTTATTG	AGGTTGGGT	10560
CAACGTTCCC	AATGCGACTG	TCATGATTAT	CATGGATGCC	GATCGCTTCG	GTCTCACTCA	10620
ACTTCACCAG	CTTAGAGGTC	GTGTCGGTCG	GGGGGACAAG	CAGTCCTACG	CTGTTCTCGT	10680
TGCTAATCCC	AAGACGGATT	CTGGGAAAGA	CCGCATGCGT	ATCATGACAG	AAACGACCAA	10740
TGGATTGTC	CTTGCAGGAGG	AAGATTTGAA	AATGCGTGGT	TCTGGTGAGA	TTTTTGGAAC	10800
CAGACAGTCA	GGACTTCCAG	AGTTCCAAGT	GGCTGATATT	ATCGAAGATT	TTCCGATT	10860
AGAAGAAGCA	AGAAAGGTTG	CTAGCTACAT	TAGTTCTATA	GAAGCTTGGC	AAGAAGATCC	10920
AGAGTGGCGC	ATGATTGCC	TTCATCTGGA	AAAGAAAGAA	CATCTGGATT	AAGCTTCTC	10980
TAAGGAAAAC	TTATACTCAA	TGAAAATCAA	AGAGCAAAC	AGGAAGCTAA	CCGCAGGTTG	11040
CTCAAAACAC	TGTTTGAGG	TTGTGGATGA	AACTGACGAA	GTCAGCTCAA	AACACCGTT	11100
TGAGGTGGCA	GATAGAACTG	ACGAAGTCAG	TAACATATAT	ATACGGTAAG	GCGACGCTGA	11160
CGTGGTTGGA	AGAGATTTC	GAAGAGTATT	AAGCTAGTTT	TTAGGTTGG	CTCTTATACT	11220
AGAGTCATCA	AAAAGAAACG	AGGACTCTCA	TATGACAGTA	ACGATTAAG	TAAATTACCA	11280
AACCACTTTC	CAAAAGAAGG	AAGCAAAAAA	CTAGTATAAA	CAGAAGAGAG	AGCGAAATGC	11340
TCTTTTTCG	TTTCTAAAAC	TACTTTCAGC	CCATCATCCT	AAAAGTAAAG	AATCTAAATT	11400
CACTTTCTAT	TTACCCCTCT	TTCTTGCATT	GATTACATAG	ATATGCTACA	GTTGTGGTAA	11460
CGATTACAAA	ATAAAAGGAG	CATGCTATGA	AAAATCCAGC	TTTGCTAGAA	GAAATTAAGA	11520
CCTATAGAGG	AAGGGATGAG	GTTCCGGAAG	ACTTTGATGA	TTTCTGGGAT	GGGAAAGTGA	11580

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AAAATGTTTC CACGCTTCCA TCCTACCACT TGGAGGAAAG AGATTTCAC ATTCCCTCAAG	11640
TCAAGTGCTA TGAGTTAAC A TTTGAAGGAA GCAAGGAAGG AAAGGTCTAT GCACGCATTG	11700
TTCTTCCAAA GAGTGAGGAG AAGGTCCCAT TAATCTTCCA TTTTCATGGT TATATGGGAC	11760
GTGGCTGGGA CTGGGCCGAC ATGCTGGGCT TCACCGTAGC TGGTTACGGT GTTGTTCGA	11820
TGGATGTGCGC GGGCCAGTC A GGTACTAC AACAGACGGCTT GCGTTCTCCT TTAGGAAATA	11880
CCGTGAAGGG GCATATTATC CGTGGTGCTG TGGAAGGTGCG GGACCACCTC TTTTATAAGG	11940
ATGTTTATCT GGATATTAC CAGTTGGTCG AAATTGTTGC TAGTCTGTCT CAGGTTGATG	12000
AGAAGCGTCT TTCTAGCTAT GGTGCCTCAC AAGGAGGGC TCTAGCTCTA GTTGACAGCAG	12060
CGCTCAATCC TCGAATTCA G AAAACAGTTG CCATTTATCC CTTCTTGTC GACTTCAGAC	12120
GGGTGATTGA GATTGGTAAT ACTAGCGAGG CTTACGACGA ACTTTTCCGT TATTTCAAGT	12180
TTCACGACCC CTTCCATGAA ACAGAGGAGG AAATCATGGC GACCCTTGCC TATATCGATG	12240
TCAAAAATCT TGCCCACATCGT ATCCAAGGTG AGGTTAACAT GATTACGGGC TTGGACGACG	12300
ATGTTTGCTA TCCCATTACC CAGTTGCGA TTTATAATCG TCTGACCTGC GATAAACCT	12360
ATCGCATCAT GCCTGAGTAT GCTCACGAAG CCATGAATGT ATTTGTCAAT GACCAAGTCT	12420
ACAACCTGGCT CTGTGGAAGT GAGATTCCCTT TTAAATATCT AAAATAAGGA GTCGACTCTA	12480
AGCACACAAAT CTTAAACACCG ATAGTATCAG GGGATTAAGA AAACCTTATA	12540
CTATGCGTTT TATCATGGAA ATATAGTAAATGAA AACAGGACAA ATCGATCAGG	12600
ACAGTCACAAAT CGATTCTAA CAATGTTTA GAAACAAATG TGTACTATTC TAGTGTCAAT	12660
CTATTATATT TATAGAATTT TTTGTTGCTA GATTTGTCAA ATTGTTAAA ATAATTTTT	12720
TCAGAAAGCA AAAGCCGATA CCTATCGAGT AGGGTAGTTC TTGCTATCGT CAGGCTTGTC	12780
TGTAGGTGTT AATACTTTTC AAAATCTCT TCAAACCACG TCAGCTTCGC CTTGC	12835

(2) INFORMATION FOR SEQ ID NO: 142:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 5020 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 142:

GGGGATATGA AGAACAAAAG AATATTTAAA GACTTCCAAG CTTCAAAAAT GAGTTAAC	60
ATTTACACAA GCCCCTTGTT AGCCTTGTT TTTGTCTCA TAGGAGAGTT TGTGGCTTT	120

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ACTTTGTATG	GTATTGGCTT	GTTAGCTCTC	ATCGGACTTG	CTAGAAATT	TGGAGAGGCT	180
GGTCAAAATC	TTGCAAGCTA	CTTGCAGACC	TTGCATCAGA	GCTTGACGGA	TAACACAAGT	240
GACTTTCGTT	TAATTTAGG	ATTACTGGCC	TTTGGTTATT	CTTAACACTG	TGTTCAGATG	300
GACAAGAAAA	GTTGAGAAAA	GACCTATTG	AACCTGGGA	TTTATAGAG	AGAATTTCCT	360
CAGCAATCTT	CTGAAAGGAT	TTAGTCTAGG	CCTGGCACTT	TTTCTTCTGA	CCTTGTAGG	420
TTTAGTGGTC	TTAGGTCAAT	ATCGTTGGA	ATCCATTAC	TTGAATCCTT	ATTCTCTTGC	480
CTTTGTCGTC	TTTACTATCC	CATTTGGAT	TTTACAGGGG	ACAGCAGAAG	AAAGTGGTGGC	540
CCGTGCTTGG	CTACTTCCTC	AATTGGCCTC	AAGAACCAAT	CTAAAACCTAG	CTATTCTTAT	600
ATCTAGCCTG	TTCTTTACCC	TGCTTCATAT	GGCAATTCT	GGTCTCACCC	CTCTATCTCT	660
AGTAAATCTC	TTTTTATTG	GAGTTGCCAT	GGCTCTTAC	CTTCTCAAA	CTGATACAGT	720
TTGGGGTGT	GCAGGTATTG	ATGGTGCTT	GAATTTGCT	CAGGTAATC	TCTTGGGAT	780
TTTAGTTAGT	GGTCAACCGT	CAGAACGTCT	CTGATGACCT	TTTACACACA	AGGCAATCAA	840
GATTGGCTAT	CAGGTGGTTC	TTTGGCATA	GAAGGTTCCA	TTATGACAAG	TCTGGTATTA	900
CTACTGCTGA	TTGTCTATCT	TGCTAATAAA	TTAAAGAAAG	AAAATGAAAG	GATGTGACTT	960
CGGTCCGTCC	TTTTCTTCGT	GAAAATACTA	TAAGTATGCT	AAAATAGGAA	TAGCACATGG	1020
AGAGAGGATT	CTTATGATCA	ATCACATTAC	AGATAATCAA	TTTAAACTAG	TATCAAAATA	1080
TCAACCATCA	GGAGATCAAC	CCCAAGCTAT	CGAGCAGTTG	GTGGATAACA	TTGAGGGGG	1140
AGAAAAAGCT	CAGATTCTGA	TGGGGCGAC	TGGAACAGGG	AAGACCTATA	CTATGAGTCA	1200
GGTCATTTCT	AAAGTCATAA	AACCAACTCT	GGTTATTGCC	CACAATAAA	CTCTGGCTGG	1260
TCAGCTCTAT	GGGGAGTTA	AGGAATT	CCCTGAAAAT	GCAGTTGAGT	ATTCGTATC	1320
CTACTATGAT	TATTACCAGC	CAGAGGCCTA	TGTCCCTTCT	AGCGATACCT	ATATTGAGAA	1380
GGATAGTTCT	GTCAATGACG	AGATTGACAA	GCTTCGCCAC	TCAGCTACCT	CAGCCCTTT	1440
GGAGCGTAAT	GATGTTATTG	TCGTGGCCTC	AGTCTCTTGT	ATCTATGGTT	TGGGTTGCC	1500
CAAGGAATAAC	GCTGATAGTG	TCGTTAGTCT	CCGTCCTGGT	CTAGAGATTT	CTCGTATAA	1560
ACTCTTGAAT	GAATTGGTCG	ATATTCAAGTT	TGAACGTAAT	GATATTGATT	TCCAACCGGG	1620
AAGATTTCGC	GTTCGTGGGG	ATGTGGTAGA	GATTTCCCA	GCTTCCCGAG	ATGAACATGC	1680
CTTCGAGTA	GAATTTTG	GAGACGAAAT	TGACCGTATT	CGTGAAGTTG	AGGCTCTGAC	1740
AGGTCAGGTG	TTGGGAGAAG	TGGATCATT	AGCGATTTTC	CCAGCGACAC	ACTTTGTGAC	1800
CAATGACGAC	CACATGGAAG	TTGCCATTGC	AAAGATTCA	GCCGAGTTGG	AAGAACAAATT	1860
AGCTGTCTTT	GAAAAGGAAG	GTAAACTGCT	TGAAGCCCAG	CGTTTGAAAC	AGCGGACAGA	1920

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GTATGATATC	GAAATGTTGC	GTGAGATGGG	CTATACCAAT	GGGGTTGAAA	ATTATTCTCG	1980
CCACATGGAT	GGACGGAGCG	AAGGAGAGCC	TCCTTATACG	CTTCTCGACT	TCTTCCCAGA	2040
TGATTCTTG	ATTATGATTG	ACGAGAGTC	TATGACCATA	GGGCAAATCA	AGGGCATGTA	2100
CAATGGAGAC	CGTCGCGTA	AAGAAATGCT	GGTTAATTAT	GGTTTCCGTT	TGCCGTCTGC	2160
TTTGGACAAT	CGTCCTCTCC	GTCGGGAGGA	GTTGAGAGT	CACGTTCATC	AGATTGTTA	2220
CGTTTCAGCG	ACACCTGGTG	ACTATGAAAA	TGAACAGACC	GAGACAGTGA	TTGAGCAAAT	2280
CATTCGTCCA	ACGGGACTCT	TGGATCCAGA	GGTGGAAAGTC	CGTCCGACTA	TGGGACAGAT	2340
TGATGACCTC	TTGGGTGAAA	TCAATGCCCG	CGTTGAAAAA	AATGAGCGTA	CCTTTATCAC	2400
AACTTGACC	AAGAAAATGG	CAGAGGATTT	GACCGACTAC	TTCAAGGAAA	TGGGTATCAA	2460
GGTCAAGTAC	ATGCACTCGG	ATATCAAGAC	CTTGGAACCG	ACGGAGATTA	TCCGTGACCT	2520
GCGCTTGGGT	GTCTTGATG	TCTTGTCGG	ATTAACCTG	CTCCGTGAAG	GAATTGACGT	2580
TCCTGAAGTG	AGCCTCGTAG	CTATTCTCGA	TGCTGACAAG	GAAGGTTTCC	TTCGAACCGA	2640
ACGTGGACTC	ATCCAGACCA	TTGGACGTGC	TGCACGTAAT	AGCGAAGGTC	ATGTTATCAT	2700
GTATGCGGAC	ACGGTTACCC	AGTCTATGCA	ACGTGCTATC	GATGAAACTG	CCCGCCGTCG	2760
CAAATCCAG	ATGGCCTATA	ATGAAGAACAA	TGGTATCGTT	CCACAAACCA	TCAAGAAAGA	2820
AATCCGTGAC	TTGATTGCTG	TGACCAAGGC	AGTTGCTAAG	GAAGAAGACA	AGGAAGTCGA	2880
TATCAATAGC	CTCAACAAAC	AAGAGCGCAA	AGAACTAGTC	AAAAAGCTTG	GAACACAAAT	2940
GCAAGAAGCA	GTTGAAGTGC	TTGACTTTGA	ACTAGCAGCT	CAGATTCGTG	ATATGATGCT	3000
GGAAGTCAAG	GCCTTGGATT	AGGGGAATAG	TATGATTTAT	TTAAGAAAGT	TAAGAAAGA	3060
AGATTGATG	TCTTTATGGG	AAATGGCTTA	TTCACAGCTT	AATCCAGTTT	GGAAACAGTA	3120
TGATGCTCCC	TATTATGATG	ATTATCAGTA	TTTTTCAAAT	TTTAAAGAAT	TCGAACTACA	3180
AAAATCAGAA	TCCATTAA	GCAACTCAAA	TCGCCTGGT	ATTTTGTG	ATGATAAAACT	3240
AGTTGGGACT	GTTTCGCGTT	ATTGGGTATG	TAAAGAAACA	AGATGGATGG	AATTGGGAAT	3300
TGGTATTAT	GATAAAAAT	TCTGGAACAC	TGGTATTGGG	AAAGTTGCTA	TGTTGCAGTG	3360
GATAGATAGG	ACGTTTCAGG	ATTACTTGGG	GTTGGAGCAT	CTGGGTTG	CAACTTGGTC	3420
AGGAAATATT	GGTATGATGA	AACTGCTGA	AAAATTAAGA	ATGAAAAAAG	AAGCTCATAT	3480
TCCAAAAGTT	CGTTATTATC	AAGGTAATA	TTTTGACAGT	ATTAATATG	GTATTTGAG	3540
AGAAGACTGG	GAGAAAATAA	ATGACGGTTA	TTATCAAATC	AATGGAAACT	CCTGAAGAGA	3600
TAGAAGGTAA	ATCCTTCGTT	CACTGGAAA	CGTGGAGAGA	GGCTTATGAT	GACCTTTGC	3660

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CTGCGGAATT TCAGGAGACA ATGACATTAG AAAGATGTCG ACTCTTAGT CAAAAGTATC	3720
CAGAAAATAC ATTGATTGCG ATGGATGGTG TGAAGATAGT TGGTTTATA AGTTATGGCA	3780
ACTGTCGTGA TGAGACTATT CAAGCTGGTG AAATTATTGC TTTATATGTT TTAAAAGACT	3840
ATTATGGAAA AGGAATCGCA CAAAAGTTAG TGAAAGCAGC TTTGACTGAT CTTAACATT	3900
TTTCTGAAAT TTTCTTATGG GTATTGAAAG ATAACAAGCG CGCCATTGCT TTCTATCAA	3960
AAATGGGTTT TACTTTGAT GGACAAGAAA AAATACTTGA ACTTGAAAG CCTATAAAGG	4020
AAAAACGGAT GGTATTCTAT TCTAAATAAT TCTCAAAAGT AAAAGCTAAT ATGGTACCAA	4080
GTCTGAAAAT TTAATAAATT AGAAAGCGAG TAAATTTATG TCCC GTTCCC AATTAACAAT	4140
TTTAACAAAT ATCTGTCTGA TTGAAGACCT CGAAACTCAG CGCGTGGTGA TGCACTATCG	4200
CGCCCCCTGAA AACAAATCGCT GGTCTGGTTA TGCCCTTCCT GGAGGTCATG TAGAAAATGA	4260
TGAGGCTTT TGCGAGTCTG TCATTGTGA AATCTACGAA GAAACAGGGT TGACTATCCA	4320
AAATCCTCAA CTTGTCGGCA TTAAAAATTG GCCACTAGAT ACAGGTGGGC GCTATATTGT	4380
CATTGTTAT AAGGCAGCTG AGTTCTCTGG TACCCCTCAA TCTTCAGAAG AGGGAGAAGT	4440
TTCCTGGGTG CAAAAAGACC AGATTCAAA CTTAAATCTG GCCTATGATA TGCTACCATT	4500
GATGGAAATG ATGGAAGCTC CCGACAAGTC AGAGTTTTTC TACCCCTGCC GTACAGAAGA	4560
CGATTGGGAA AAGAAAATCT TCTAGTCTTT TACTAAATAA CCTAGCTGAT CCAAGGCCTC	4620
CTCGATATAG TGGAGGTCTT GTTGTGTCTC GGCTTCAACT AGGTGATAAT GAATACCATC	4680
TGTTAACTCA GAAATTGGCT TAAAGTCAGA ACAGTTCAACT TGTTCTAGAA AATGTTGCAC	4740
GTCGCGGGGA CAGGTCAGTT TTAGTAAGGT TTCAATCTCT CCATAAACAG GATGATCAAT	4800
CAAGATATTT TGAACCGCAG CACCAATTATC TACGATAGCA AGTAATTCTC GTCCAATTTC	4860
TTCAACTTCA TGCTTGACCT TAAATAATTG GTGATGATAA GTATTTGCAT TAGCATCTT	4920
ATAGATATAA CCACGATTGG TAGATAGAAT TGGAGATCCA TCAGCTCTTA AAATTGCAAT	4980
ATCTTGAACA ATAACTTGTC GAGTGACATG AAAGTGCTCA	5020

(2) INFORMATION FOR SEQ ID NO: 143:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4965 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 143:

AAAAAGTGGC AATCCATTGA TTGGCCACTT CATTAGAGA ATTATCGTCT CGCCCTTGAA

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GAAGAAGGTC	GTTAGTACT	TGAGTTACTG	CTATCGCTAG	AACTACTACT	TGAAC TGCTG	120
GAGCTGGATG	GAGTTGGTAG	ACTCCCCACA	ATACTAGACC	AAGCATTCTG	ATAATCCGCA	180
TCACCTCCGC	CAATAGCAAA	GCGATAACTT	GTCGCTGGCG	CTCCTGACTT	ATTAGCCCAA	240
TAGCTGGTAA	CAGTCGAACC	TGTGACCTCT	ACTTCTTTTC	CTTCAACAGA	AACCTTCTCT	300
GGTTTTGAC	CTGTTGATTT	CAAGACTTCC	GATTCACTA	CACTAGGATC	TAAAGCAAAG	360
CGCTCGTTCC	CCCAAATGCT	TGGGAAGCT	TGCTGAATCG	CATTACCA	ATGAGCCATG	420
TAATTAGAGT	TATTAGAATA	ACCTGCTCTA	CGTGACAATG	AATGATTATC	ATCATGCCA	480
ATCCAGCCAC	CTAGGGTTAA	TCTAGGTGTC	GAAAGCATGA	GCCACATATT	TCGCTTTGG	540
TTGGTTGTAC	CAGTCTCCC	AATCCAATCT	GCATTAGCCA	GAGTAGGATT	TAAAGAAGTC	600
AGGTTAGACT	TGAAGGGTGT	TGTCACACGA	GAGGATAGAA	CTTCTCGTAG	CAATCCCTGC	660
ATAATCGTCG	CAGTAGCTTT	TGAATAGACT	TGAACCGGTT	TATCCTGATA	CTCATACACC	720
ACTCTACCAT	CTGCTGCTTC	AATCTTGAA	ATCACATGCT	TCTGATGATA	AACTCCATTA	780
TTAGCTAAGG	TCTGATAGCC	ATTGGTATGC	TGGGCAACTG	TGACTTCAAT	ACCACCA	840
ATTGGCAAGC	TCTCAATACC	GTACTCAGGA	ATCTCGTAAC	CCATCTTTTC	CATATAACCC	900
TTGACATCAA	CACCCTTTTC	ACGGAGCATA	CGATAGGTCC	AGTAAGCAGG	GATATTCCAT	960
GAATAGTTCA	GAGCTCTCC	CAAGGTCA	ATTCTGTTC	CCTTGCTATT	AGCATAACATA	1020
ATCGGATTGC	CATTAGCAA	GTGTTGGA	TAGTTAGATA	GAATCGTTTC	ACTTCCCATC	1080
AAGCCCTGGT	CAATAGCAAT	ACCGTAGGCC	ACCAAGGGCT	TGGTAGT	AGCTGGCGAA	1140
CGTTGGTAT	CAAAGGCATG	ATTATTTGA	TTTTCTTGAT	AATTACGACC	ACCTACAAAG	1200
CCTAGAATAG	CACCTGTTG	GTTATCCATC	AAGACATTCC	CTACTTCTAC	ACGACCTGTT	1260
CCATCGTCTA	AAAGATAGCC	ATAATCAGCA	ACCGCACTTT	GCATGCCAGA	ATGAATTTC	1320
TGATCTATGG	TAGTAGTAAT	CTTATAACCA	CCATTTCAA	TTTCCTGGC	TGCCAAATCT	1380
CGATAAAACT	TCTGAGTTGC	CTCATTTTTC	AACTCCTTAG	CGGAGACATT	GTCTCTCTGA	1440
GCTAGATAGT	CATACATACG	TTCTTGAGCT	TCTGCCAAAG	TTGTAAAGTA	TAAATAGTCT	1500
CGTGAAATTC	CTGTAACCGT	GCCCCGATGGT	AAAAAGTCCT	GTTTAAGGTC	ATAATCCTTG	1560
TACTGAGAAT	ACTCGCTTT	GCTTAATGCA	CCTGTACGAT	ACATACTGTA	AAGAACTGCC	1620
TTAGCCCGTC	TTAAGCCAAT	TTCTAGGTCT	TCATCACTCT	TCAACTCCCC	AGTATTTC	1680
TAAGGAGAGT	AAGTAATGGG	ACTCTGTGGA	AGTCCTGCTA	AAAATGCTGC	TTGAGGAACA	1740
GTCAACTGAC	TGGCATCTAC	ACCGAAAATT	CCCTCAGCTG	CTTGCCGAGC	CCCTGCAATA	1800

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TTCTGTCCT TATTATTCG	GCCAAAGGGA	CCCACATTGA	GATAGGTCGT	TAAAATCTCA	1860
TCTTTATTCA	TGGCGCGTTC	CAAGGCAAGA	GCATCCACAA	TCTCTGCCG	1920
AAGGTCGGCG	CATCCCCAAC	CACCTGCTGT	TTAATTAGTT	GCTGGGTCAA	1980
CCACTAGAGG	AACCCAAAC	TACAAATTTC	CCCAAGGTCG	CACGAATCAC	2040
ACTACACCCCT	TATGTTCTTT	AAAGTGTCA	TCTTCTGTCG	CAATGATAGC	2100
TTTTCGAAA	TTTGCTCAGA	TGAGATAGAA	GTGCGCAACA	AATCACTCTC	2160
ATCACCGTCC	CGTCCGAATA	GGTAATCTCT	GAAATAGAAG	AGATGTCCTT	2220
ACCAATTCTT	CTGTCGAGG	CACCCGAACC	TTGTCAAATA	AGGCCACTCC	2280
GCAATCCCAG	CTCCCCAACAT	TCCTCCTAGA	AAACCGAGTA	CAAAGAGTAA	2340
GCTTTTATAC	TCAGTAAAAT	AGCTGGAAA	ATGACTGACT	TATCTAAGGT	2400
TTGGTACTTG	AACCTTCTT	GCCAGGTCTA	GCTGATTTT	TATTTTTTG	2460
AAAAATTCCA	GCATTTTCG	TTTTAATTCA	TTTAATTGAT	TTTGCATGGA	2520
TTATCTATTA	TACCACAAA	GGGAAATTTT	CAATAAAAATA	GCCACTTCT	2580
GCTAGGCTAT	TGCCCAAGTT	TGTGATACAA	TAGGTAGAAA	CAATAATTTC	2640
AAAAACACAT	GCACATTTTT	GATGAGCTAA	AAGAGCGTGG	TTTGATATTT	2700
ATGAAGAACG	TTTGCCTAA	GCCCTAGAAG	AAGGTCAAGT	TTCTTATTAT	2760
ATCCAACCTGC	TGACAGCCTT	CACCTAGGCC	ACCTTGTGCG	AATCTTGACA	2820
TGCAACTAGC	AGGTACAAA	CCTTATGCGC	TCGTTGGCGG	TGCTACAGGT	2880
ATCCGTCTT	CAAAGATGCT	GAACGTAGTC	TCCAAACAAA	AGACACAGTA	2940
TCAAGTCTAT	CCAAGGACAA	CTTCTCGTT	TTCTTGACTT	TGAAAATGGC	3000
CTGTCATGGT	CAACAACTAC	GACTGGTTG	GCAGCATCAG	CTTCATTGAC	3060
ATATTGGAAA	ATACTTCACG	GTCAACTACA	TGATGAGTAA	GGAAATCTGTT	3120
TCGAAACAGG	AATTTCTTAC	ACTGAGTTCG	CTTACCAAAT	CATGCAAGGG	3180
TCGTCCTTAA	CCAAGACCAT	AATGTCACTC	TTCAAATCGG	TGGTCTGAC	3240
ATATGACAGC	TGGTACCGAA	TTGCTTCGTC	GTAAGGCGGA	CAAGACTGGT	3300
CTGTTCCACT	AATCACAGAT	GCAACTGGTA	AGAAATTGG	TAAATCAGAA	3360
TCTGGCTCAA	TCCCAGGAAAG	ACTTCTCCAT	ACGAAATGTA	CCAATTCTGG	3420
TGGACGCTGA	CGCTGTTCGC	TTCTTGAAAA	TCTTTACTTT	CTTGTCACTT	3480
AAGATATTTCG	TAAACAATT	GAAGCAGCGC	CACACGAACG	CTTGGCTCAA	3540
CTCGTGAAGT	TGTTACACTT	GTTCACGGAG	AAAAGCCTA	CAAAGAAGCA	3600

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CTGAGCAACT	CTTTGCAGGA	AACATCAAAA	ACCTTCTGT	CAAAGAGCTC	AAACAAGGAC	3660
TTCGTGGTGT	GCCCAACTAC	CAAGTACAGG	CAGACGAAAA	CAACAATATC	GTGGAACCTGC	3720
TCGTCTCATC	TGGTATAGTT	AACTCAAAAC	GCCAAGCCCG	TGAAGACGTC	CAAAACGGAG	3780
CCATCTACGT	AAACGGCGAC	CGCATCCAAG	AGCTTGACTA	TGTCTTGAGT	GACGCTGATA	3840
AGTTAGAGAA	TGAACGTGACT	GTTATCCGTC	GTGGGAAGAA	AAAATACTTT	GTATTGACTT	3900
ACTAAACTAT	TCAACATTAA	TCTATAAACAA	AAGGAGTTAA	CCTCGAGAAA	GGTAACCTCCT	3960
TTTGCTGTT	AATAACTCTC	ATCTATCTAT	TTTTAATAGA	CAGGCTACGC	AGGACAATGC	4020
GCAAGGTTGT	TAGATTATGT	AAGATAGAGA	GATTGAGG	ACTGAACCAA	TTAAATAAGC	4080
CAAAGCCAAT	CAAACACTA	TTTACGACAA	CGGTATCCTG	AATATTTTC	TTGATGAGTG	4140
TTTGCAAAGA	TGATGATAAC	GAATCCA	CTTGGGAAGAA	ATCCAAACGA	TTATCTAACAA	4200
ATAAGATATC	ACTCATCTGC	TTAGAAATAT	CTGCACTCTC	ATTCATCAC	ACACCGATAT	4260
CTGATAGAGT	TAAAGCCGCT	GAGTCATTCA	ATCCATCTCC	AACCATCAA	ATAGTGTGAC	4320
CTGCTTCTG	CAGTTCTCT	ACTAACTCAA	ATTCCCAC	AGGTTCAAG	TCTGTATAGA	4380
CCTGATCAA	GGGCAAATCT	TTGACTAATT	CCTCTGTCT	AATCAAGGTG	TCTCCTGTTG	4440
CCAGAATCAA	TTTTTCCCC	TGTGCCTAA	GTTTATCAA	GGCTGTTTT	GCTTCTTTTC	4500
TCAAAGGAGT	ATGAATGCAG	AACATTCAA	TCAATTCA	TTGATAAGCC	AAGAATAAGA	4560
GATTGTAGTG	ACTCTTGAC	TCTTCAATTAA	AAGCATTG	TTCTGAAC	ATATGAATCT	4620
GCTCATCCTG	CATCAAGACA	TAATTCCAA	TAAGAACTGG	TTGGCCATCT	ATATGAGATT	4680
TGATCCCCTT	GCTTGCATA	TATTGGAGTT	TCCCAGC	TTCCTCATGT	TCAATTCCCT	4740
CTATCTCAGC	TTGCTTGACG	ATGGCATTAG	CAATAGGATG	ATAAAATGTGT	TCCTCAAGAC	4800
AGGCACGTGAT	TCTGAGAATA	TCTTCCAC	TATAGTCTCC	AAAAGGTAAC	ACCTTTCAA	4860
CTATAGGATA	ACTAGTTGTG	ATTGTTCTG	TCTTATCAA	CAAGAAAGTA	TCAACTTCCA	4920
GATATTCTC	CCTGTTGTGG	CCTCTGGCTG	TCATCTCTGT	GCTGG		4965

(2) INFORMATION FOR SEQ ID NO: 144:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 3232 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 144:

970	
CAGGGGCGTA TTACGTGACA ATTCAATGTA GGCTGTCGCT ACTTGCGCCA AAACAAGGAT	60
TCGATAATGT CGGATGATAC TAACGATTAA ACCGAGCAGA AAGGATCCCA AAATTCCCCA	120
AACTGCAATA TGCAAGGTCA GAAAGAATGC CTTTGATAT AGTGGTAGAT ATTGTTCAAC	180
AATGGATCAA TCCAAAAATA GAACCTCCC TCTAGAAATA ATACAGTTAT TGTAGCACTT	240
AAAATCTTCT TTGGATAATA TCTATTTTT ATTGCCGTTA TAAGGATTT TATCATAGAC	300
ATAAAATTTC TGAAATTCC AAACAAAATA TTTAAAAGT TTTGAAAAAG AGTTAAGATA	360
TTTTGTAAAT ACACAAAGTA AACGCTTAAC TATTAAGGAG GACATTTAT GTCATACAAA	420
ACAAGCAATG CAGAAGGTCA TGTAGATTTC ATCAATACCT ATGATTTGGA GCCAATGGCG	480
CAACAAGTTA TTCCTAAAGC AGCATTGTC TATATCGCTA GTGGGGGGG AGATACTTTC	540
ACTTCTTCC AGTGATTTA GCGTCAGGTT CTTTTAGTT TTTAAAGATT ATCCGTGAAT	600
TTCTTGCTTA TTTATGATAA AATGGGAGTG TCGCAAAAAA TGACTCATCG TATTCAATT	660
TGAGTAAAAC TAGGAGGATC CCATGTCTAC AGAACATATG GAAGAACTAA ATGACCAGCA	720
GATCGTTCGC CGTGAAAAAA TGGCTGCGCT CCGCGAACAA GGAATCGATC CTTCCGAAA	780
ACGTTTGAA CGTACTGCAA ATTACAAAGA ATTAAAAGAT AAATATGCCA ACCTCGATAA	840
AGAACAAATTA CACGATAAAA ACGAACACGC TACTATCGCA GGACGCTTGA TAACCAAACG	900
TGGTAAAGGA AAAGTTGGTT TTGCCACCT TCAAGACCGC GAAGGCCAGA TTCAGATCTA	960
CGTTCGTAAG GATGCTGTCG GTGAAGAAAA CTACGAAATC TTCAAAAAAG CAGACCTTGG	1020
TGACTTCCTT GGTGTCGAAG GTGAAGTGAT GCGTACGGAT ATGGGAGAAC TCTCTATCAA	1080
GGCACCCAC ATCACACACT TGTCTAAGGC TCTTCGTCT CTTCCTGAGA ATTCCATGG	1140
TTTGACAGAC GTTGAAACAA TTTACCGTAA ACGTTACCTT GACTGATTT CTAATCGTGA	1200
AAGCTTGAA CGCTTGTC CTCGTTCAAA AATCATCTCT GAAATCCGTC GTTACCTTGA	1260
CCAAAAAGGA TTCTTGAAAG TGGAAACACC TGTTCTTCAT AATGAAGCCG GTGGTGCTGC	1320
TGCCCCGTCCA TTTATCACCC ACCACAATGC CCAAAACATT GACATGGTGC TTCGTATCGC	1380
GACTGAGCTT CACTTAAACAC GCCTTATCGT GGGTGGTATG GAACGTGTCT ATGAAATTGG	1440
CCGTATCTTC CGTAACGAAG GAATGGACGC TACTCATAAC CCTGAGTTCA CTTCTATCGA	1500
AGTTTACCAA GCTTATGCAG ACTTCCAAGA CATCATGGAC TTGACTGAAG GCATTATCCA	1560
ACACGCTGCT AAATCAGTCA AAGGTGATGG CCCAGTCAAC TACCAAGGTA CTGAAATCAA	1620
GATTAACGAA CCATTTAACG GTGTTCATAT GGTGGATGCT ATCAGAGAAA TTACTGGTGT	1680
CGATTTCTGG CAAGACATGA CTTTGGAAAGA AGCTAAAGCT ATCGCTGCTG AGAAGAAAAGT	1740
TCCAGTTGAG AAACACTACA CTGAGGTTGG TCACATCATC AATGCCTTCT TTGAAGAGTT	1800

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TGTTGAAGAA	ACTTTAATCC	AACCAACCTT	TGTCTATGGA	CATCCAGTAG	CTGTATCTCC	1860
ACTCGCTAAG	AAAAATCCTG	AAGACCAACG	CTTTACTGAC	CGTTTCGAGC	TCTTTATCAT	1920
GACTAAGGAG	TACGGTAATG	CCTTACTGGA	GTTGAACGAC	CCAATCGACC	AACTTAGCCG	1980
TTTTGAAGCC	CAAGCTAAAG	CCAAAGAACT	TGGTGATGAT	GAAGCGACAG	GAATCGACTA	2040
TGACTACATT	GAAGCTCTTG	AATACGGTAT	GCCACCAACA	GGTGGTTGG	GAATCGGTAT	2100
CGACCGTCTC	TGCATGCTCC	TCACTGATAC	AACAACATAC	CGTGATGTAT	TGCTCTTCCC	2160
AACAATGAAA	TAAATTCTTA	TCCTCTGGGT	CTTATCAGAG	GATTTTTGA	TTCAAAAAGA	2220
GACTGAATT	AAGGAGAAAA	TGAAGTGTAG	TATATTGAAA	TTGAAATAGT	ACACTTTGAT	2280
TTCTAAGACA	TTGTTAGAAA	TTGGTTAAA	TTCCCTAAGC	AATTTGTGCA	TGTTTTATTT	2340
CATTTTACGA	TAGTACCGCTG	AAACTTTCA	AAAAGTACTA	GAAATTGACT	TGGATTCCCC	2400
AAATTGATTTG	TTCAGATTCA	CTATAAATAA	AAAATTAATA	AGTGGGATAG	GAAGTTAGCG	2460
TCAACTAGGAA	TAGTATCTTG	CTTAAACAGT	ATATATGGGA	TTGATATAAG	TCCATAGGTC	2520
CTATTAGAGG	ATGTTCTGGT	GTCTTATTCA	CTTGTTTTTT	ATAGTATTAG	TAGATAGAAT	2580
CAGCAAATAA	AAACCCAAAT	CATTCTACACC	TCTCTCAACT	AGATGTAAC	TACAAAACCC	2640
CTGACCTCAT	GAGCCACTTT	CTTCCTCCTC	ATGAGGTCAG	TTTTACTTTC	TGCTGTTCCA	2700
GTATCGTTT	TCCTCGCTAG	ATTTCTCAA	AAGGGCAGAC	TCCTCCCTTG	GTGCGTCACA	2760
CGATTTTTTC	ATCTCGACTG	TTCTTTAATG	CATCATTAAC	GACGCTTTTC	TTCTAGGTGG	2820
TTCATAAGGA	ACAGGAAGAT	TCAGGTTGAC	TTTTCTAATC	CTAGAATAAA	GTGCTGAAAA	2880
CAATTCTGGAA	TAGGCATAGA	GACTAGACAA	TTTGAGGAGC	TGCTTCCGTC	CTGTTCGAAC	2940
ACATTTTCCC	ACCACGTGAA	GAAAAAGATG	GCGGAAGCGT	TTGATTGTTA	AAGTTGGAA	3000
GTCACCTCCA	GCTAGATGTT	TGAGAAAAAG	ATAGAGATTG	TAGGCGATAC	AGCTCATCAT	3060
CATACGAACT	TCGTTTTGA	TTAAGGTTGA	ACTATCCGTT	TTATCGCCAA	AAAATCCCTC	3120
CTTCATCTCC	TTGATGAAAT	TCTCGGTTG	ACCACGTCCA	CGATAAAGCT	GAAACTGGTC	3180
TTGGCTTGTT	CCACTCGTCA	TATTTGTAAC	GAGAGAAATA	ACATCGTAGA	AC	3232

(2) INFORMATION FOR SEQ ID NO: 145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10711 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 145:

CCGGAGAAAA	TGATGAAAAG	TTCAAAACTA	TTGCCCTTG	CGGGCGTGAC	ATTATTGGCG	60
GCGACTACTT	TAGCTGCATG	CTCTGGATCA	GGTTCAAGCA	CTAAAGGTGA	GAAGACATTC	120
TCATACATTT	ATGAGACAGA	CCCTGATAAC	CTCAACTATT	TGACAACTGC	TAAGGCTGCG	180
ACACAAATAT	TACCAAGAAC	GTGGTTGATG	GTTTGCTAGA	AAATGATCGC	TACGGGAAC	240
TTGTGCCGTC	TATGGCTGAG	GATTGGTCTG	TATCCAAGGA	TGGATTGACT	TACACTTATA	300
CTATCCGTA	GGATGCAAAA	TGGTATACTT	CTGAAGGTGA	AGAATACCGG	GCAGTCAAAG	360
CTCAAGACTT	TGTAACAGGA	TTAAAATATG	CTGCTGATAA	AAAATCAGAT	GCTCTTTACC	420
TTGTTCAAGA	ATCAATCAA	GGGTTGGATG	CCTATGTAAA	AGGGGAATC	AAAGATTTCT	480
CACAAGTAGG	AATTAAGGCT	CTGGATGAAC	AGACAGTTCA	GTACACTTG	AACAAACCGA	540
AAAGCTTCTG	GAATTCTAAG	ACAACCATGG	GTGTGCTTGC	GCCAGTTAAT	GAAGAGTTT	600
TGAATTCAA	AGGAGATGAT	TTTGCCAAAG	CTACGGATCC	AACTAGTCTC	TTGTATAACG	660
GTCCTTATT	GTTGAAATCC	ATTGTGACCA	AATCCTCTGT	TGAATTGCG	AAAAATCCGA	720
ACTACTGGGA	TAAGGACAAT	GTGCATGTTG	ACAAAGTTAA	ATTGTCATTC	TGGGATGGTC	780
AAGATACCA	CAAACCTGCA	GAAAACTTA	AAGATGGTAG	CCTTACAGCA	GCTCGTCTCT	840
ATCCAACAAG	TGCAAGTTTC	GCAGAACTTG	AGAAGAGTAT	GAAGGACAAT	ATTGTCTATA	900
CTCAACAAGA	CTCTATTACG	TATCTAGTTG	GTACAAATAT	TGACCGTCAG	TCCTATAAAT	960
ACACATCTAA	GACCAGCGAC	GAACAAAAGG	CATCGACTAA	AAAGGCTCTC	TTAAACAAGG	1020
ATTCCCGTCA	GGCTATTGCC	TTTGGATTTG	ACCGTACAGC	CTATGCCCTCT	CAGTTGAATG	1080
GACAAACTGG	AGCAAGTAAA	ATCTTGCCTA	ATCTCTTGT	GCCACCAACA	TTTGTCAAG	1140
CAGATGGTAA	AAACTTGGC	GATATGGTCA	AAGAGAAATT	GGTCACTTAT	GGGGATGAAT	1200
GGAAGGATGT	TAATCTTGC	GATTCTCAGG	ATGGTCTTTA	CAATCCAGAA	AAAGCCAAGG	1260
CTGAATTG	TAAAGCTAAA	TCAGCCTTAC	AAGCAGAAGG	AGTCCAATTC	CCAATTCTT	1320
TGGATATGCC	AGTTGACCAA	ACAGCAACTA	CAAAGTTCA	GCGCGTCCAA	TCTATGAAAC	1380
AATCCTTGG	AGCAACTTTA	GGAGCTGATA	ATGTCATTAT	TGATATTCAA	CAACTACAAA	1440
AAGACGAAGT	AAACAATATT	ACATATTTG	CTGAAAATGC	TGCTGGCGAA	GACTGGGATT	1500
TATCAGATAA	TGTCGGTTGG	GGTCCAGACT	TTGCCGATCC	ATCAACCTAC	CTTGATATT	1560
TCAAACCTTC	TGTAGGAGAA	AGTACTAAAA	CATATTTAGG	GTTTGACTCA	GGGGAAAGATA	1620
ATGTAGCTGC	AAAAAAAGTA	GGTCTATATG	ACTACGAAAA	ATTGGTTACT	GAGGCTGGTG	1680
ATGAGACTAC	AGATGTTGCT	AAACGCTATG	ATAAATACGC	TGCAGCCCAA	GCTTGGTTGA	1740

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CAGATAGTGC	TTTGATTATT	CCAACTACAT	CTCGTACAGG	GCGTCCAATC	TTGTCTAAGA	1800
TGGTACCAATT	TACAATACCA	TTTGCATTGT	CAGGAAATAA	AGGTACAAGT	GAACCAGTCT	1860
TGTATAAAATA	CTTGGAACTT	CAAGACAAGG	CAGTCACTGT	AGATGAATAC	CAAAAAGCTC	1920
AGGAAAAATG	GATGAAAGAA	AAAGAAGAGT	CTAATAAAA	GGCTCAAGAA	GATCTCGCAA	1980
AACATGTGAA	ATAACTGTTG	CAAATATAA	GAAAGGATT	AGTATTTCCC	TTGAATGCTG	2040
AATCCTTTT	TACATTGTA	AAGAAAGATT	CTAAAATGTA	CGGACCCCCA	AAAGTTGGAG	2100
CCTCTTTTG	TCAGAATAGA	GAAAATTTT	GTAAATTTA	CTTGTTCCT	ATTGCTTTCT	2160
CAGCTATTAT	TTGTTATATT	AAAAGTATAA	TTATTTTTA	TTTATCAGAG	TTAACGCATTG	2220
CACTTTCAGA	GGAAGGAGTA	TTTTTAAAAA	AGAAAATGTA	AACGTTGCT	CAAAAATGAA	2280
AGGATTTAGA	AGTTTATGAA	TAAAGGATTA	TTTGAAAAC	GTTGAAATA	TAGTATTCCG	2340
AAATTTTCAT	TAGGTGTTGC	TTCTGTTATG	ATTGGAGCTG	CATTCTTGG	GACAAGTCCG	2400
GTTCTTGCA	ATAGCGTGCA	GTCTGGTTCC	ACGGCGAACT	TACAGCTGA	TTTAGCTACT	2460
GCTCTTGCAA	CAGCAAAAGA	GAATGATGGG	CGTGATTTG	AAGCGCCTAA	GGTGGGAGAA	2520
GACCAAGGTT	CTCCAGAACT	TACAGATGGA	CCTAAGACAG	AAGAAGAACT	ATTAGCACTT	2580
GAAAAGAAA	AACCGGCTGA	AGAAAAACCA	AAAGAGGATA	AACCTGCAGC	TGCTAACCT	2640
GAAACACCTA	AGACGGTAAC	CCCTGAATGG	CAAACGGTAG	CGAATAAAGA	GCAACAGGGA	2700
ACAGTCACTA	TCCGAGAAGA	AAAAGGTGTC	CGCTACAACC	AACTATCCTC	AACTGCTCAA	2760
AATGATAACG	CAGGCAAACC	AGCCCTGTT	GAAAAGAAGG	GCTTGACCGT	TGATGCCAAT	2820
GGAAATGCAA	CTGTTGATTT	AACCTTCAAA	GATGATTCTG	AAAAGGGCAA	ATCACGCTTT	2880
GGTGTCTTT	TGAAATTTAA	AGATACCAAG	AATAATGTT	TTGTCGGTTA	TGACAAGGAT	2940
GGCTGGTTCT	GGGAGTATAA	ATCTCCAACA	ACTAGCACTT	GGTATAGAGG	TAGTCGTGTT	3000
GCTGCTCCTG	AAACAGGATC	AACAAACCGT	CTCTCTATCA	CTCTCAAGTC	AGACGGTCAG	3060
CTAAATGCCA	GCAATAATGA	TGTCAATCTC	TTTGACACAG	TGACTCTACC	AGCTGCGGTC	3120
AATGACCATC	TTAAAATGA	GAAGAAGATT	CTTCTCAAGG	CGGGCTCTTA	TGACGATGAG	3180
CGAACAGTTG	TTAGCGTTAA	AACGGATAAC	CAAGAGGGGG	TAAAAACAGA	GGATACCCCT	3240
GCTGAAAAAG	AAACAGGTCC	TGAAGTTGAT	GATAGCAAGG	TGACTTATGA	CACGATTCAG	3300
TCTAAGGTCC	TCAAAGCAGT	GATTGACCAA	GCCTTCCCTC	GTGTCAAGGA	ATACAGCTTG	3360
AACGGGCATA	CTTGCCAGG	ACAGGTGCAA	CAGTTCAACC	AAGTCTTAT	CAATAACCAC	3420
CGAACATCACC	CTGAAGTCAC	TTATAAGAAA	ATCAATGAGA	CAACAGCAGA	GTACTTGATG	3480

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AAGCTTCGCG ATGATGCTCA CTTAATCAAT GCGGAAATGA CAGTACGCTT GCAAGTTGTA	3540
GACAATCAAT TGCACTTGA TGTGACTAAG ATTGTCAACC ACAATCAAGT CACTCCAGGT	3600
CAAAAGATTG ATGACGAAAG CAAACTACTT TCTTCTATTA GTTCCCTCGG CAATGCTTTA	3660
GTCTCTGTTT CTAGTAATCA AACTGGTGCT AAGTTTGATG GGGCAACCAT GTCAAACAAT	3720
ACGCATGTCA GCGGAGATGA TCATATCGAT GTAACCAATC CAATGAAGGA TTTGGCTAAG	3780
GGTTACATGT ATGGATTGT TTCTACAGAT AAGCTTGCTG CTGGTGTGTTG GAGTAACCTCT	3840
CAAAACAGCT ATGGTGGTGG TTCGAATGAC TGGACTCGTT TGACAGCTTA TAAAGAAACA	3900
GTCGGAAATG CCAACTATGT AGGAATCCAC AGCTCTGAAT GGCAATGGGA AAAAGCTTAT	3960
AAGGGCATTG TTTTCCAGA ATACACGAAG GAACTTCCAA GTGCTAAGGT TGTTATCACT	4020
GAAGATGCCA ATGCAGACAA GAACGTTGAT TGGCAAGATG GTGCCATTGC TTATCGTAGC	4080
ATTATGAACA ATCCTCAAGG TTGGGAAAAA GTTAAGGATA TCACAGCTTA CCGTATCGCG	4140
ATGAACTTTG GTTCTCAAGC ACAAAACCCA TTCCTTATGA CCTTGGATGG TATCAAGAAA	4200
ATCAATCTCC ATACAGATGG TCTTGGCAA GGTGTTCTCC TTAAAGGATA TGGTAGCGAA	4260
GGCCATGACT CTGGTCACTT GAACTATGCT GATATTGGTA AGCGTATCGG TGGTGTGCAA	4320
GACTTCAAGA CCCTAATTGA GAAGGCTAAG AAATATGGAG CTCATCTAGG TATCCACGTT	4380
AACGCTTCAG AAACTTATCC TGAGTCTAAA TACTTCAATG AAAAAATTCT CCGTAAGAAT	4440
CCAGATGGAA GCTATAGCTA TGGTTGGAAC TGGCTAGATC AAGGTATCAA CATTGATGCT	4500
GCCTATGACC TAGCTCATGG TCGTTTGGCA CGTTGGGAAG ATTTGAAGAA AAAACTTGGT	4560
GACGGTCTCG ACTTTATCTA TGTGGACGTT TGGGTAATG GTCAATCAGG TGATAACGGT	4620
GCCTGGCTA CCCACGTTCT TGCTAAAGAA ATTAACAAAC AAGGCTGGCG CTTTGCATC	4680
GAGTGGGCC ATGGTGGTGA GTACGACTCT ACCTTCCATC ACTGGGCAGC TGACTTGACC	4740
TACGGTGGCT ACACCAATAA AGGTATCAAC AGTGCCATCA CCCGCTTTAT CCGTAACCAC	4800
CAAAAGATG CTTGGTAGG GGACTACAGA AGTTATGGTG GTGCAGCAA CTATCCACTG	4860
CTAGGTGGCT ACAGCATGAA AGACTTTGAA GGCTGGCAGG GAAGAAGTGA CTACAATGGC	4920
TATGTAACCA ACTTATTGTC CCATGACGTC ATGACTAAGT ACTTCCAACA CTTCACTGTA	4980
AGTAAATGGG AAAATGGTAC ACCGGTGACT ATGACCGATA ACGGTAGCAC CTATAATGG	5040
ACTCCAGAAA TGCAGTGGA ATTGGTAGAT GCTGACAATA ATAAAGTAGT TGTAACCTCGT	5100
AAGTCAAATG ATGTCAATAG TCCACAATAT CGCGAACGTA CAGTAACGCT CAACGGACGT	5160
GTCATCCAAG ATGGTTCAAGC TTACTTGACT CCTTGAAACT GGGATGCAAA TGGTAAGAAA	5220
CTTTCTACTG ATAAGGAAAA GATGTAACAC TTCAATACGC AGGCCGGTGC AACAACTTGG	5280

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ACCCCTCCAA	GCGATTGGGC	AAAGAGCAAG	GTTTACCTTT	ACAAGCTAAC	TGACCAAGGT	5340
AAGACAGAAG	AGCAAGAACT	AACTGTAAAA	GATGGTAAAA	TTACCCCTAGA	TCTTCTAGCA	5400
AATCAACCAT	ACGTTCTCTA	TCGTTCGAAA	CAAACTAATC	CTGAAATGTC	ATGGAGTGAA	5460
GGCATGCACA	TCTATGACCA	AGGATTAAAT	AGCGGTACCT	TGAAACATTG	GACCATTCA	5520
GGCGATGCTT	CTAAGGCAGA	AATTGTCAAG	TCTCAAGGGG	CAAACGATAT	GCTTCGTATT	5580
CAAGGAAACA	AAGAAAAAGT	TAGTCTCACT	CAGAAATTAA	CTGGCTGAA	ACCAAATACC	5640
AAGTATGCCG	TTTATGTTGG	TGTAGATAAC	CGTAGTAATG	CCAAGGCAAG	TATCACTGTG	5700
AATACTGGTG	AAAAAGAAGT	GACTACTTAT	ACCAATAAGT	CTCTCGCGCT	CAACTATGTT	5760
AAGGCCTACG	CCCACAATAC	ACGTCGTGAC	AATGCTACAG	TTGACGATAC	AAGTTACTTC	5820
CAAACATGT	ACGCCCTCTT	TACAACCTGGA	GCGGACGTCT	CAAATGTTAC	TCTGACATTG	5880
AGTCGTGAAG	CTGGTGATCA	AGCAACTTAC	TTTGATGAAA	TTCTGTACCTT	TGAAAACAAT	5940
TCAAGCATGT	ACGGAGACAA	GCATGATACA	GGTAAAGGCA	CCTTCAAGCA	AGACTTTGAA	6000
AATGTTGCTC	AGGGTATCTT	CCCATTTGTA	GTGGGTGGTG	TCGAAGGTGT	TGAAGATAAC	6060
CGCACTCACT	TGTCTGAAAA	ACACAATCCA	TATACACAAAC	GTGGTTGGAA	TGGTAAGAAA	6120
GTCGATGATG	TTATCGAAGG	AAATTGGTCA	CTCAAGACAA	ATGGACTAGT	GAGCCGTCGT	6180
AACTGGTTT	ACCAAACCAT	CCCACAAAAC	TTCCGTTTTG	AAGCAGGTAA	GACCTACCGT	6240
GTAACCTTTG	AATACGAAGC	AGGATCAGAC	AATACCTATG	CTTTTGTAGT	CGGTAAGGGA	6300
GAATTCCAGT	CAGGTCGTCG	TGGTACTCAA	GCAAGCAACT	TGGAAATGCA	TGAATTGCCA	6360
AATACTTGGG	CAGATTCTAA	GAAAGCCAAG	AAGGCAACCT	TCCTTGTGAC	AGGTGCAGAA	6420
ACAGGCGATA	CTTGGGTAGG	TATCTACTCA	ACTGGAAATG	CAAGTAATAC	TCGTGGTGAT	6480
TCTGGTGGAA	ATGCCAACTT	CCGTGGTTAT	AACGACTTCA	TGATGGATAA	TCTTCAAATC	6540
GAAGAAATTA	CCCTAACAGG	TAAGATGTTG	ACAGAAAATG	CTCTGAAGAA	CTACTTGCCA	6600
ACGGTTGCCA	TGACTAACTA	CACCAAAGAG	TCTATGGATG	CTTTGAAAGA	GGCGGTCTTT	6660
AACCTCAGTC	AGGCCGATGA	TGATATCAGT	GTGGAAGAAG	CGCGTGCAGA	GATTGCCAAG	6720
ATTGAAGCTT	TGAAGAATGC	TTTGGTTCAG	AAGAAGACGG	CTTTGGTAGC	AGATGACTTT	6780
GCAAGTCTTA	CAGCTCCTGC	TCAGGCTCAA	GAAGGTCTTG	CAAATGCCCTT	TGATGGCAAT	6840
GTGTCTAGTC	TATGGCATAAC	ATCTTGGAAAT	GGTGGAGATG	TAGGCAAGCC	TGCAACTATG	6900
GTCTTGAAAG	AACCAACTGA	AATCACAGGA	CTTCGCTATG	TTCCGCGTGG	ATCAGGTTCA	6960
AATGGTAACT	TGCGAGATGT	GAAACTTGTT	TGACAGATG	AGTCTGGCAA	GGAGCATACC	7020

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TTTACTGCAA	CTGATTGGCC	AAATAACAAC	AAACCAAAAG	ATATTGACTT	TGGTAAGACA	7080
ATCAAGGCTA	AGAAAATTGT	CCTTAAGTGGT	ACCAAGACAT	ACGGAGATGG	TGGAGATAAA	7140
TACCAATCTG	CAGCGGAAC	TATCTTTACT	CGTCCACAGG	TAGCAGAAC	ACCTCTTGAC	7200
TTGTCAGGCT	ATGAAGCAGC	TTGGTTAACG	GCTCAGAAAT	TAACAGACAA	AGACAATCAA	7260
GAGGAAGTAG	CTAGCGTTCA	GGCAAGCATG	AAATATGCGA	CGGATAACCA	TCTCTTGACG	7320
GAAAGAATGG	TGGAATACTT	TGCAGATTAT	CTCAACCAAT	AAAAGATTC	TGCTACGAAA	7380
CCAGATGCTC	CAACTGTAGA	GAAACCTGAG	TTTAAACTTA	GATCTTAGC	TTCCGAGCAA	7440
GGTAAGACGC	CAGATTATAA	GCAAGAAATA	GCTAGACCAG	AAACACCTGA	ACAAATCTTG	7500
CCAGCAACAG	GTGAGAGTCA	ATCTGACACA	GCCCTCATCC	TAGCAAGTGT	TAGTCTAGCC	7560
CTATCTGCTC	TCTTTGTAGT	AAAAACGAAG	AAAGACTAGT	ATTTAGTAAA	ACCTCTAAC	7620
AAGATTACGG	AAGCAGTCTC	TATCTTTCC	AATGAGGTTT	ATAGTACAGA	AAAAGCCTGA	7680
GAAGATGTCT	TCTCAGGCTT	TTGTTAACGA	CATAAATACA	ATAGTGTAT	GACAAAATCA	7740
CCCAGAAAAA	TCTGGGTGAT	AAATGTTATG	GTTGTGCTGG	TTGAGGATTC	TGATTTGTT	7800
GATCAGGGGT	TGTATTGAT	TGTTGGTAT	TATTGTTAGG	ATTGGTAGTC	GTACTATTAT	7860
TTGTGCTTGG	AGTGGGTGAG	CTAGACTGTG	AAAGTTGAAC	ATCTGATGAT	GAGCTTGAAC	7920
TTTCAGTTGA	TGGGGTTGT	TGTGGAGCAG	GTGAGTTCCA	CGTAGAACGA	GCACCATT	7980
TAAATACGAA	TTCTCCATT	CTGTAGAGCC	CCTCTGGTAT	ATTCCAATCT	TCTGGATTGC	8040
TTCCTTCAGA	CAGGTAGGTC	ATCATAGAGC	GGTAAACTTT	GGCAGCGACC	GTAAGGCCAT	8100
TGCCTACAAG	TGGTGTCA	CGGTTAGAAT	AGCCTGTCCA	TACAGCCATT	GAATATTAC	8160
GCGTATAGCC	AGCAAATAGT	TCATCAGGTG	CTACAAATTG	AGAGGTCTTG	ATGTGGTTT	8220
CAATTTCTC	GTCTGTATAG	TTAGAGGTT	CTGTTTAC	AGCCTGAGGG	AGCCAAGCAA	8280
GATAGGCATT	TCGTCCAGTT	CCATAAGTCA	AGACTGTTT	CATCATGTCG	GTCATCATAT	8340
AGGCTGTCGT	TTCCTTCATG	GCACGAGTTC	CGACATTAGA	GAACCTTTT	TCACTCCCCT	8400
CACTAAAGAC	GACTTTATGG	ATATACATTG	GTTTATAGTA	AGTTCCACCA	TTTGCAAAGG	8460
CAGCGTAAGC	AGCAGCCATC	TTTCACTAC	TTGCTCCATA	TTTTTGTCT	GATTCGGTTG	8520
TGTTACTTGA	AATGGCATT	GAGTAGTGAA	TACTTGGTA	GTCGATTCC	AGACCATT	8580
GGAAAGTCTT	GGCGCGGTTG	AGTCCGACCT	TGTTTAGAGT	TTCCACGGCT	GGGACGTTTC	8640
GCGATTGTTG	CAGGGCGTAT	TGCAAGGTGA	TGTTGCCAAA	GTAGCCCCTA	TCCCAGTTAT	8700
AAACAGGAGT	ATTGTCCC	GGGTAGTTAT	AGGGCTCATC	GTGAACGATA	GTAGCAGTTG	8760
AATCGTAGAC	ACCGTACTCC	AAGGCAGGAG	CATAGTCTGT	GATCGGTTTC	ATAGTTGATC	8820

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CCAGTCGCG	GTTTGTTC	ACTGCTGGT	TAATTCCGAA	GGAAACATTA	CTTGACTGAT	8880
GGCGTGCTCC	TAGCTGGCA	ATGACTTTAC	CGTTAGAAC	ATCAACAATG	GTAGAACGGA	8940
CTTGCAATT	ATCGTCTGGA	TAGGCAACGT	ATTCGCTGT	ATTGTAAATA	TCCCACAGAT	9000
GTTTTGAGC	TTCTTGGTCT	ACATTGTGT	AGACATCCAT	CCCAGTTGTG	AGTAGGTTAT	9060
AGCCTGTTTC	TTCTTCAACT	TGATTGATGA	CTTCCTTGAG	GTAATTATCC	ATGTAAGCAG	9120
GGTAATTACT	TGCTGATTG	AGACTTTGTA	GTCCCATCGT	AATTGGTGT	TTGACTGCTT	9180
TCTCATACTG	TTCAGCAGAG	ATGTAGCCTT	GATTTTCAT	TTCAGATAAG	ACCAAGTTTC	9240
GGCGGTCTTG	GGCTGCTTCT	GGATGTGAAT	AGGGGTCTA	TTGGTTGGT	GCCTGAGGCA	9300
TTCCAGCCAG	CAAGGCTAAC	TGAGGTAAAC	TTAAATTATT	GAGGTCTTTA	CCATAGTAGT	9360
TTTGAGCTGC	TGTCTGCATT	CCATAGTTCC	CATTAGACAT	GTAGACCTTA	TTTATATAGT	9420
AGGTCAAGAT	TTCTTGGTTG	GTTGCTTTT	GTTCTAACTG	AATCGCTAAC	CAAGCTTCCT	9480
GAGCCTTACG	AGAAATAGTC	TGGTCGGAAG	TCGAAGTTGA	AAAGTAAGTC	AACTTAATCA	9540
ACTGTTGGGT	GAGAGTTGAT	CCACCTTGG	GGGAATTGCT	TTGCAGATTG	CGCAAGAAAG	9600
CTCCCAGGAT	ACGGATGGTA	TCAATCCCC	TGTGGTCGAA	GAAGCGATGG	TCTTCGATAG	9660
AAACGATTGC	CTTAACCAAA	TCTGTGGAA	TATCATTAGC	TTGGGCATTG	ACGCGGCGTT	9720
CAGAACCCAA	GTCAGCAATG	AGTTGATTTT	TATTGTCGTA	GATTTACTA	GAAGTTGTTG	9780
CAACTAGTT	ACTCTCGGAT	AGGCTAGGAG	CCTTGCTAAC	GTAGTAGAAA	AAAACCTCCTC	9840
CGCCTAAGAC	AATGGCTGCG	ATAACCAAGC	TTAAGAAGCT	AATGCTCAGA	TACTTGATTA	9900
GGCGCAGAAT	CGTTGGTTTG	TTCATCTTGT	TTTACCACCT	AATAAATGTT	CTTTGATAAC	9960
ATTGAGATAA	GGAATTGAG	GGAAGGCACC	AGCCTTGATT	TCATATCCAT	ATTCTCGAAT	10020
ATATTCAAGT	GGCATTGATT	TTTGCCCTT	ATCTGATGA	TAGAAGCGAA	TCAAATCGAA	10080
TGCCGGCAAT	AAGTAGGTTT	CTTGCTGAGA	AGAAAAGTGA	AGAAGGACAA	AGCAGATTCC	10140
TTGTTGGGCA	AGGACTTGTT	CCATATGCTG	AATCTGATGT	GGATGAAAAT	TTTCATCGG	10200
AATCGCACGT	TTTTGTTTTG	TTTCCCTGAC	TCAAAGTCG	ATGTAATATC	CATTATAAAC	10260
GCCAGAATAG	TCCGTCGTTG	AAGCTTGTG	AAAATAGGCT	TCAACAATCT	TGGCACGACT	10320
TCGTTGTGGA	TAGTCCACTT	GTACGATTG	AATAGGAGTT	GGTTTCTTAT	GTATAACAGC	10380
CAAGCCCTGA	GACAAATAGT	AGTCGTTGGT	AGCATTGATC	ATCTTTCAA	AGGGTACCGA	10440
GCTCGAATT	GTAATCATGT	CATAGCTGTT	TCCTGTGTGA	AATTGTTATC	CGCTCACAA	10500
TCCACACAAAC	ATACGAGCCG	GAAGCATAAA	GTGTAAAGCC	TGGGGTGCCT	AATGAGTGAG	10560

978	
CTAACTCACA TTAATTGCGT TGCGCTCACT GCCCGCTTTC CAGTCGGGAA ACCTGTCGTG	10620
CCAGCTGCAT TAATGAATCG GCCAACGCGC GGGGAGAGGC GGTTTGCATA TTGGCGCTC	10680
TTCCGCTTCC TCGCTCACTG ACTCGCTGCG C	10711

(2) INFORMATION FOR SEQ ID NO: 146:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11887 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 146:

TACATTTCATT CCATCGGCTA CTCCATAATA CTTAGATAAA ACCATAGCTG AAGTCGAATA	60
CGGATACTGT AAAGTATTAT CAATTTAAT CAAATCATCA TTACCGATAA TACTTCTGAT	120
TGCTTTGGT AGTATGAACC ATACGTTGGT GAAATCTCAG ATAATGAAGA ATCATTAGAC	180
TCTGGACCTT TTTCTAGTGT CTCACCTTAC TCATATTCTT CACCCTTACT AGAAATAACA	240
CTCAAAGCAG ATACTGTCGA TAACTGGCTA GCCAATAAG TACTCGCAAT AATTGAAATA	300
CCCAATTCTT TATAAACAGT TTTCTTCATT ATTGTATCCT CCTAATGTAA TTATAGCGTA	360
CTATTCTAAA TTTCTTAATC TACTATAGAA TCAAGAAATC TACCACCTTC TTTAAATACC	420
CTCCATTATC ACATAAACAG GTAAACTTTT CAATTATGA CTGCGCTTTT CAATCACGCT	480
AGAGGTACTT GCTTGCTTCT TTGATACTAA GTTCAGCCAT TCTTCCCTTG TTTTCTCAA	540
TAAGGCATGT TACCCAAGTG GGATTCGTTT TGGAGTAGTC TCGCAGACTC CAGCCAATGG	600
CTTTATTGAT AAAAATTCT GTTGGTTCA AGTTATGAAG GAGAATCTT TCCATTAATT	660
GAGTATTGGT CTTCTCTTTT CTTAACAACT GGTGGTCAAT AGCGACACGT CTCAGCCAGA	720
TATTATCTGA TAGGCTCCAT TTTATACTCA ATGAAAATCA AAGAGCAAAC TAGGAAGCTA	780
GCCGCAGTTG CTCAAAACAC TGTTTGAGG TTGCAGATAG AGCTGACGTG GTTTGAAGAG	840
ATTTTCGAAG AGTATTAAGA TTATTCTTC TAGTTCAGGG TGTTCATACA CCAAACCTCC	900
TACTACTCGA TCTAGGATAT CTACCGTGTG CCACAAAGGAT TTTGTCACGA CTAAC TGCTC	960
TAGCTTAGGC AAATCGTTT CCTTTAGATA AGACTGCATT GCTTCAAAT AGTTAGCAGC	1020
CACATATTGG TATTTCTAG GATCCTTTCC CAGCAAGTG TCTGCAAAT CCCAATCGAT	1080
AATCTTGTT TTTTCGCTT CTGGAAAATA TTTTATAGAG TTTATTTCTT TCAGGCACCG	1140
CAATACCTAG AAAAGAAAAT TGATGGCGCA TATAGGCTTC CATGGACCTT GCTTTTTAG	1200
AGTCTTTGCG TGCTTCTAGC TCCTCAAGTA AATCTGCTAA ACTCATCTAA AACTCCTCTT	1260

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GCCCCACCAA	ATGGTGCTGA	AAGGCATAGA	CAGCCGCCTG	GGTACGATCG	CTGACTTCAA	1320
GTTTGGCAAG	AATATTGGAC	ACGTGGGTCT	TGACCGTCTT	GAGAGAGATA	AAGAGGTCAT	1380
CTGCGATGCG	CTGATTTCTG	TAGCCCTGG	CGATGAGTTG	GAGAACATCT	CGCTCACGCG	1440
CAGTCAAATTC	TTCATGAAGT	TCCATATGAT	TGCGGTGGTA	TTCAACCTTC	TTGCTAACCT	1500
CTTGCTCAAT	GGCCAGCTCG	CCAGCAGCTA	CCTTACTGAC	GGCATGAAGC	AATTCACTG	1560
CACTAGAAGT	CTTGAGCATA	TAGCCTTGG	CACCAGCATC	TAAGACTGGC	ATGATTTTT	1620
CATTGTCCAA	ATAAGAGGTC	ACAATCAAAA	TCTTGGCTTC	AGGCCATTCT	TTAAGGATTG	1680
CTAAGGTCGC	GTCAATCCCA	TTCATCTCAG	GCATGACAAT	ATCCATGACA	ATGACATCTG	1740
GACGCAGTTC	CAAGGCCAAG	TCAATCCCTT	GAGACCCGTT	GGACGCCTCA	CCCACAACTT	1800
CTACATCGTC	TTGGAGGTCA	AAAGTAGCTTT	TCAAGCCCAA	TCGGACCATT	TCATGGTCAT	1860
CTACTAGTAA	AATTTCTATC	TTTACTCCTT	TATCATTCCCT	TATCTAACAG	GGGAATACGG	1920
ATATCAACCG	CCAGCCCTTG	CTTGGGAGCT	GTCAAGAGTT	GAACTGTTCC	AGCCATATCT	1980
TCAACCCGCT	CCTTGATATT	TCGCAGTCCA	TAACTCAAGT	CGTCTAACGCT	CCCTAACCTGG	2040
AAACCAATCC	CATTGTCCAC	CACCTTCAGT	TGCAATTCAA	CATCTGTCTG	ATAGAGGTAG	2100
ACATCTAGGC	AAGATGCCTG	GGCATGGCGG	AGGGTATTGC	TAATCAACTC	TTGCAGGATA	2160
CGGAAGATAT	GCTCCTCGAT	TTTCTTAGGC	AAATTCGTCA	TATTCTGCTT	GAGACTAACCC	2220
CTAAGATCAC	TCTTGTCCCTC	AAGCTCTTTT	AAAAGAATTTC	GAATCCCTTC	TATCAAGCTC	2280
TTCTGCTCCA	GTTCAACTGG	TCGCAAATGC	AAGAGCAAAA	CCCGCAAATC	CTTCTGGGCT	2340
GTTCCTAAAA	TAGCTGTGAC	ACTCTGCAAC	TGGGTCTGCA	TCTTTCTCT	ATCCAATTTC	2400
AAAGCCTGCT	GACTGATACC	CGATAAAATC	ATGTGGGCCG	CAAACAACTC	CTGACTGACT	2460
GTATCGTGCA	AATCCCGAGC	AATTGCTTCTC	CGTTCTTCTCT	CGATGATTTC	CTCTTCTGTA	2520
GCAAGGCTCT	GATTTTCAGC	TTTTTGAGA	GCCTCTGTCA	AAAGGTTAAG	TTTACCTGAT	2580
AAGGACTGTGA	AACTGGCATC	CAAATCTGGA	TCTGCAACCT	GAACCACTTC	TTGCCCTGCT	2640
AATAAACGCT	TGAGATTAGC	CTGCATTTTT	CTTAGAGAAA	GCTCTTCGAT	CCCTCGCCAA	2700
AACAGGGCTA	AGAGACAGGT	CATGGACATG	CTGAAAACCA	ACAATAAAA	GACAAATTTT	2760
TCTGTTTTTT	CGACATCGTG	AAAAAAGATA	GACCAAGTCAA	AATCAAGTAT	TTCCAGCAAG	2820
CTGTGGGAGA	AAAAAAAGAC	AAATAGGAAG	GAGGTGAGAG	CAATAATGAC	ATAGGCTTGT	2880
TTTTTCATCC	TCTAACACCAC	TCCACATCAC	CAATCATAGT	GGTCAAGAAA	ATCTTGACAC	2940
TCTTGTTACT	CTTGAGATAG	TCTTTGTTT	CTTGATGATA	GTGTTCATCG	CGGAGGGCTC	3000

980						
GCTTGGGCTG	GTTGAAAAAA	ATCAAATCCC	CATAGAGACA	GTAAACGCTG	AGACTGACTT	3060
CCACATCTAC	AGGTACGATG	ATTTGGTCG	TTCCTTACCAT	CTTTCTGAGG	ATAATGACAT	3120
TGTCATGATT	GGTTAAGATG	ACCCCTCTCCA	GATGAATAGT	GTCCTTGCCC	ATGAAGCGAA	3180
AGAGATTGAT	ATCATCGAA	TGGCAAGTCT	GGTAGCTTGA	AAAATGATGA	AGATTTCCTAA	3240
ACCAACGATT	TTTCTCCTTC	TTAACCGTCA	CGACCTCTTC	AAAAACCAAA	TTGGTCTGCT	3300
CTTTTCCTG	GTTCATCATC	GGGTAAAGAA	GAAAGAGGCT	ATAGATAACC	GCAACAAAAA	3360
TAGCTAGAAT	CACAAAAGGA	TTGAGCATAA	CGATGAAAAA	GAAGAGAATG	GTTGCCGCTA	3420
CTAAAAGAAG	ATTATTTCCC	TCTTACCAAG	TGTAGTAGCG	AATCAAAAGC	AAAAAGAGGA	3480
ATAGTATCAG	CAGAAAACGC	GAAAAATGCT	CTGATACCAT	CAAATCAGA	GCTCCTGTCA	3540
GAAGACAGGC	TTCGATAAAAT	AAAAAGATTT	TAAATTTCT	CATAGGTTCA	TCCTCTCCCT	3600
TCTATTTAT	CACAATTCAA	AAAAGTCACC	TCAGTCTGAG	GATGGAAAAA	AGGCGCTGGT	3660
TACGCCTTT	TCATCTGATC	CTTGCTTCT	TTAATTTTC	CATAAAGAAG	ATAGTCTACT	3720
TTTTGTAGAT	CTGCTATGGT	GGCACAGTTA	AGGAAACACA	TAATCAAGCG	TAGATCTGCT	3780
TTCCAGCCTT	GGACAATGCC	AATCACTTCT	TCAACTGTGT	AGGTTTCAAC	CAATTCCAGA	3840
ACGGTTCGTG	ACAATCCAC	AGCCTTAGCA	CCAAAAAACCA	AGCACTTAAT	CATATCCAGC	3900
GGATTCCGAA	CCCCTCCACT	AACCAAGAGT	TCGACCTTAT	CTTCCATTC	TTGGGCATTG	3960
AGAAGGGCCT	GCATGGTAGA	CTGACCCCAT	TGATTGAGGT	AATCACGCTG	GCCACTACGA	4020
CGGTTTTCGA	TATAGGCAAA	GCTGGTCCA	CCACGACCCG	ATAGGTCCAC	TGTACGAACAA	4080
CCGAATTCA	AGGCTTTTC	GATTGTCTTG	GCATCCATTC	CAAAGCCCAC	TTCCCTTGAGG	4140
ACAATAGGAA	CGGGAATTG	CTTGCTATAA	TCTGCTAGAT	GCGATTGCCA	GCTTCTAAC	4200
TTCCTTCTC	CCTCGGGCAT	GAGTAATTCC	TGCATGACAT	TGACATGCAC	TTGCAATAGA	4260
ACAGGATTCA	TCTCTTCTAC	AGTCTGAAGT	CCTAACTCGA	CAGGCTTGTG	CAATCCAATA	4320
TTGGTTCCAA	GGAGGAGATT	GGGATGACTA	GACTTGACAG	AAAAAGAATC	ATCCGTTGGA	4380
TTTTTGAGGG	CTGCGCTATA	AGAACCCGTT	ACAAATAAAA	TACCACAGGA	TTCCGCCACC	4440
TGAGCCAGCT	TTTGATTGAT	TTCTCTTCCC	TTATTACTTC	CACCAGTCAT	GGCATTGATA	4500
TAAAAAGGAA	AGTCCCACCT	TCGACCAGCA	AACTCTGTG	AAAGATCGAT	TTCATCCAGA	4560
TTGTAAAGAG	GCAAGGAAGA	ATGAATCAGC	TCCACCTCAT	CAAAGCTATT	ATAGGAACCTT	4620
TTCTGCTCAA	GGGCATAGAG	GATATGCTCG	TCCTTACGAT	TTGTCGTCA	GTCCTATCCT	4680
TTCTTGATAT	AAGAGCTCAA	TCCCCAGATC	GGCCCAACGA	TTTTTTAAGG	TTTTGGTTGA	4740
TTGCGCATCA	AAACTCAGGG	CGATGCCACA	GTCACCACCA	CCAGCACCAC	TACTCTTGGC	4800

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AACGGTCTGC	AAATCTTGAC	TGGCTCTTT	CAACTGTCTA	AGCAAAGGCG	TGTAAATATC	4860
TGTACTCAAG	CCTTCTAAAA	GCTTGCTGGC	TACTTCTACT	TGATCGATAA	TCTTTCTGA	4920
TTTCCCCTGT	TCCAAGGCTT	CTACCAAGAGA	AGTCACCGTT	TCTTTGAGG	AAGTTAAAAA	4980
ATTTTGATTG	ATATTTGCT	TGATTTGCTG	GACCATGTGA	CTCGATACAG	CCACTTCCTT	5040
GGTCCATCCC	ACTAAGAAAT	CACATTCTAA	AGTTGGTTTC	ACTTGTGAAA	TTGAAAAGCC	5100
CCAATCACGC	TCCAGAACTG	TCGCCAAGTT	TTCTTCTTCT	AACCAAGCAG	CCACCTCTG	5160
GCGATCAAAT	GAETGGTAGA	GAACCAAATC	CTCTGCCACA	ATACAGGCAA	GGTCGCCCAT	5220
GGAACCATTG	TCTCCTCGCT	TAAGCAAGAC	AGCGCTAGTC	AGCTTGAAACA	AGAGCTCCTG	5280
ATCAACAGAA	ACATCATACA	GAGCCAGTAA	AGCCTTGACA	ACCAAGACAA	CGACGCTGCC	5340
ACTAGAACCT	AGACCAAAC	TTTTCCCTTC	TCGTTCCATT	TTGCCACAGA	TTCTAGAGA	5400
AAAAGGTCTT	AAATTCTGAC	CACGAACAGC	GAGGAAGTCT	CCCATCAAAG	CAATCGTTTC	5460
TTGAATCAAG	CTATAGTCAG	GATTAGGCCT	TAAGTCCACT	GCGAAATCAA	ACATATCTGA	5520
ATAGATAACGG	TAGCTGTCAG	AAAAAGCAAT	CTCAGCCCTC	ATATAGATGG	GAATATCCTT	5580
TATCAAAGCT	AACTGCCCTG	GCTCTAAAAT	AGCATATTCA	CCTGCCCAAT	AGAGTTTCC	5640
GCAAGTTTTA	ACAGCAATCA	TCTTGACTCA	AATCCTTTGT	TTTGACACCA	ATCAAGCGAT	5700
AACGATGACC	AAAAATTCT	GATAAATGCT	CCAAGTCTTT	CTCCTGACAG	AAGACCTTAA	5760
CATTGGGACC	AGCATCCATG	GTAAAGTAGC	AGGCCTCTCC	TTTCTCACGA	AGCTGGCGAA	5820
CAAAGGCCAT	AGCCTCATAA	GAGGCATCCG	TCAGATAAGA	AAAGGCTGGA	CTAGCAGTCT	5880
TTGTCGTAGC	ATGCATAGCC	AGGGCATTTC	TCTCCGTTAA	TTCTCCAATC	TTGGCAAAAT	5940
CATTTCCCTT	GAGATAAAC	AGCATATCCT	GATAGTCCTT	CTCAGACTGA	CGAACCCAGT	6000
CGTCGAAAGT	CGTCGAGGTT	TCCACACAAA	GTTCATCCC	GTCACGGCTA	GAGATTGGTT	6060
TTTTCTTGTC	CTCTAGCACC	AACATAATCA	TAGCTAGTTT	CAAGTCTGTC	TCTACAGGGT	6120
AAATTTCTCC	ACTATCCCTA	TCCCAGGCTC	CTAGTGGTCC	ATAAAAACTC	CGAGAAGAAG	6180
AACCTGAGGC	AAATTTGGCT	TCCTGTGCCA	ACTGACTTCT	ATCCAATCCA	AGCTTGAAAT	6240
AAGCATTACA	AGCCTTGACC	AGGGCGGACA	AACCACTAGA	ACTTGAGGAC	AGACCCGCTG	6300
CCGTAGGCAT	ATTGTTTGA	GTATCGATAC	GGACAAAGCC	CTCACCGAGCT	GGACGATAAAC	6360
GGTCAATAAT	CTTACTCATC	TTGGCATGCT	CGACCTCATT	TTGTAGCTGA	CCATTGATGT	6420
AAAATTCGTC	AGCTGTTACA	TTGGCTGGTA	AAGGCGACAA	GGTCGTCTCT	GTATACATAT	6480
TTTCCAAAGT	TAGAGAAATA	CTGCTAGTAG	CAGGCACCAT	CTCTTTTCT	TTTTCTTTC	6540

982	
CCCAATATTT GATAATAGCA ATATTTGCGT AGGAACGTAC TGTTACAGGC TCTCTATCCA	6600
TGTCTGAACA GCTCCTTTCT CTTCTAATCT TTCTGCTAGT TCTTGTGCGT GTGTCAAATT	6660
GGTTACCAAG GCTATGATAC AACCTCCTAG CCCACCACCG CTCATCTTGG CACCCAGAGC	6720
ACCATGGCTA AGAGTCGTTT CAACCAAAAA GTCTGCCTCA GGGCTACTGA CTCCAATTTC	6780
TTTTAAATGT AAATGCGCTT GACTGAGGAT TTGTCCCAGT CCTTCAGCAT CTTTTGTGA	6840
AATCGCAACT TCTGCTGCT GGGTTAACCTC TCCCAAGGCA TGCAAAAACG GTAGGGCCTC	6900
CTTGCCCTTA TTTTGAACCA CTTGGATGGC TTCACGAGTA TGACCATAAA CACCCGTATC	6960
GGCAATCACC AAATAGGCCTG ATAAATCCAT CTCAAGTTCT GTAAATCCTA CGTTCTTGAT	7020
AAAGCGAATA GGTTGGTCAC TAAGACAGGT CTTAGCATCC AAACCACTAG GATTCATATG	7080
GGCAATCATT TCAGCTCGAT TGACCAAGAT TTCTAGTACA TCATGAGGCA GATCAGCCTG	7140
ATAGTAGTCA AATACTGCAC GAATGGCCGC TATGCTGATA GCCGCTGACG AACCCATCCC	7200
CCGTTTCTCA GGGATAGCCG AGTCAATCTC ACAACGAATG CAGGCTTCTG TGATATTCAA	7260
ATACTCCAGT GAGGCATAAA CCGCCATGGA CAAGGTATCC TCCTCATAAA GGCGCCAAGG	7320
ACTCTCTGCA GGAACCTACCT TACAGGTACAC CTCCACCTCC AAAAGAGGCA GGGAAATGGC	7380
AGGATAACCG TAAACGACCG CATGTTCCCC TATTAAAATT ATCTTACTAT GTGCCTGACC	7440
GACACCAACT TTTTTGTCA TTTTTCCCTT TTACTAGACG AAAAAACGTC TTATTTTCA	7500
TACAAGTATT AATTCTTCC TATCTATTTT ATTATATTTT CACAAAAAA GCGATTGTTT	7560
CCATTACCAA TCGCTTCTTT CATTATTGAA CCCATTCGCC ATTATAGTTG ACAGAATAGC	7620
CATCTACGGT CGTATTCACT GCCAAGGCAC CTGAGCGCTA TAAGCGTAGT ACCATCTGCC	7680
ATTGACCTGG AACCAACCTG TCGTCATAGA ACGACGAAAG AAACCTCCATA CCATTAAGTA	7740
AAGAGGAAAG TCGTGAGGGA GCATGCGCCA TTGACAACCT GTTTTAGTGA CGTACAAAGT	7800
CTCATTAACA AGTACTCGTT TCGGCCATTT ATAGGTGCGG TGTTTGGAGA AATAGGGTTC	7860
AATCTTCGCC CATTCTTGAT CGTTAAATC AGTATCATAT GCTTTGCCGA TCATAACTCT	7920
AGCTTAACAT TTTTTGTGA ATACAGGTTC TAAAATAATCG ACCACGAAAA TTTCTTAAGT	7980
GGAAAACGCC TTATGAAGTA TGCTACGGGA AAGTTATGCA CTTAATTGA CAATTCAAGA	8040
TGTAAAATA TATACTATAG TAGATTGAAA CTAGAATAGT ACACCTCTAC TTCTAAAATA	8100
TTGTTAGAAA TCGATTGAC TGTCTGATC GATTTATCCT GTTATTATCT CATTCTACTA	8160
TAATATTGAA TAAGTTATCC TAAAAGTATT ATTATGTTGT TGTGTTATAG ATTGATTGAA	8220
TCTAACTAAA GGATCCTATT CAATTACTAG AACTATCACA TACTCAAGGT CAGCTCACAG	8280
ATGAGCAACT ATTTGGTTA CAATGTCTAC TAAATTAAAG TCAAACAAAT AATTTAGTCA	8340

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AAATTAAAAA AATAGAGGAA CATAAATATG ATTACAAAAC AGAATGTAAT AGTGTCTAC	8400
AATTTTACT AGATAAAACT GTAAATTCTG AAGGAAGGAT CACTTCTCA ACAGAATTG	8460
GAAATTCGT AAGTAATTG TCATTCCAAC ACGGAATAGC TGGACTACTG TTTCCTCTAA	8520
ATAAATTGTA CCCCCCAGAA CTGGATTCTA AAATACTCTC TATCATCAAG AAGGCAGTGA	8580
CAATTAGAAC GACACACACA TATGAATATC AATACTCACT GCTATTTGGT GATGCAGGCT	8640
ATCTATGGTT ACTCCTACAT TTATTTCTA TCAGTAAAAA TCAACTATAT CTACAATTAG	8700
CAAACGTCAC CGCTAAAAAA TTAATAGAGA ATTATGATAC TCTAGAGGAA ATAGACTTTG	8760
CATTGGGAAA ATCTGGTGTGTC CTATTATCAT TAATAAAAATA CTATCAATT ACCAATGACA	8820
ATACTCTTAA AATTTTCATC CACAATAGTA TAGGGGAAAT TTATCATTAT TTCCTACAAA	8880
GAGATACAGC CAAAGAAAGC ATTTAGACT ATAGCTTGC TCATGGATAT TGTGGAATTG	8940
CATATGCTTT ATTTGCCTAT TCTAAAGTCT TAGAACCTTC TATGTTTAT AATGATCTCC	9000
ATACATTCCA TACTGAATTA AAAAATTAT TAGAAAAAGT TACTTCTAAT ACTGAAAATT	9060
TAGGAAATTG ACAACTTTCT TGGTGCAAAG GAATTCCGG AATAATCTTA TATCTTGTA	9120
TGTACGATTG TGACGGAAAC AAAGATATTA TTAGTAAATA TCAAGAATTG GTTTTAACC	9180
ATCATCTAAA AATGATGACA GGATATTGCC ACGGAATAAC TAGCTTACTA CAAACCACTG	9240
TCTACAATCA AAACAAATTA CTGATGAAAA AAATCCAACA GGTAATTGTA GCATGTTCTG	9300
AACGAGATGTA TCACGGTTA CTGATGTTTC AAGGAGATAG TGGTAAAGCA GATTTGTTG	9360
ACTTCGGAAT AGGAAGCATG GGGTATATTG GTGTCTATTA AATAATAAT TCCCATTGCA	9420
TGTGCAGACA TAAGGAGAAA AGTATGAAAT TATTTGGAC AAACAACATA TATAGACAGT	9480
TGCTGCTAAA CAGCTGTTT TCATCATTGCG GCGACAGTAT TTTCTACCTC GCCATTATCA	9540
ATTATGTGGC TCAGTACAAT TTGCTCCGC TAGCGATTGTT ACTGATTCC ATTTCAGAGA	9600
TGGTCCCCCT ACTATGCCA CTCTTCTCG GGATTCTAGG AGATTTCAA GAAAATAGAG	9660
TCAAACACGC ACTCTGGATT GCCAAAATCA AAATCCTGCT CTACGCTATT TTGACAGTAT	9720
TTCTCGTCTT GTCGCCCTT TCATTAGTTT CAGTCATTAT GATTGTCATC ATCAACCTCA	9780
TCTCTGACAC CTTGAGCTAC CTGCTGCCT ACATGATGAA CGCCCTCTAC ATCAGTGTAA	9840
TTAAGGACGA CCTGCATGAT GCCATGGGGT TCAGGCAGTC TCTGATGAGG GTTGTCCGTA	9900
TTGTCGCCAA TCTGGCTGGC GCATTCCTTA TCAATGTTAT AAGTATTCAA ACTATTTCCC	9960
TTATCAACAC TCTGACTTTT GTCATTGCCT TTTTGGGCCT GTATGTTATT CGACATACCT	10020
TGTATGAGGT TGAAAAAAGA ATTGAAATGT CACATACAGC ACTGAGTTT AAGAAATATT	10080

984

TTCAACATCT	TAAACAGTCG	CTGGCTGTGC	TCCTGAGGTT	AAAAGATACC	GTCATACTAC	10140
TGTTTCTGAC	GACCAGTATG	ATTGCCATCT	TGGATGTGTC	CCCTCGGCTG	ATTGCCCTCC	10200
GCTTCATCCA	ACAGACACTA	GCACAACCTGA	GCATTGGGCA	ACTCCTCGCC	CTGCTCTCCA	10260
TCATCATGTC	TTGTGGAGCT	ATCCTTGGCA	ATATGACCAG	CAGTAATCTA	TTTAAAAATA	10320
TCCGTTTCAC	GCACCTCTTG	GTGTTCTGTG	AGATTTCCCT	ATTGACTCTA	ATAACTAGTA	10380
TCCTTTGTCA	AGCCTATATC	GTAATTTCA	TGACCAGTTT	CATCACTTCT	ACGATTATCG	10440
GCATTCTCAG	CCCTCGCCTA	CAAGCAGCTG	TCTTTGCCA	TATCCCCAGT	GACAAGATGG	10500
GGACGGTGGG	CTCTGCTCTG	AGCACAGTGG	ACATTCTCGC	CCCGTCCCTG	CTCTCCCTAT	10560
TAGCCCTATC	CATAGCATCG	GGCGTTTCGG	TGCAGTTAGC	ATTGATATT	TTGTATCTTA	10620
TTTTAATTGC	TCTTATCTTT	TGTCAATGGT	TAGTCAAGTT	CAACACTCAT	AACTAACGAA	10680
AAAGCATGTG	TAGATTCAC	ATGCTTTAA	TCTCCCCAAT	CGTCAGGTCA	AGTACAACAA	10740
AGTCACTTCT	TTGATTAAGC	GAGTGTCTA	ATATAATTAT	AAGCGCCCTG	TCATTACCGA	10800
ACCCATTCCG	CATTATAGTT	GACAGAATAG	CCATCTACGG	TCGTATTAC	TGCCAAAGCA	10860
CCTGAGCTAT	AAGCATAGTA	CCAGTTGCCA	TTGACCTGGA	ACCAACCTGT	CTTCATGTCT	10920
CCATTACCTG	CATTTAGGTA	GTACCAAGTT	GAACCATCTT	GATACCAACC	AGTTGCCATA	10980
GCTCCTGATG	AACGGAGATA	GTACCATTTG	TTCCCAAGGT	TTTGCCAACC	TGTTTCATA	11040
TCGCCATTTG	GGTGGTCTAA	ATAATACCAA	GTGGTACCTT	CCTGATACCA	GCCAGTGGCC	11100
ATTGCTCCTG	AGGAACGGAG	GTAGTACCAAC	TTATTACCTA	GATATTGCCA	ACCTGTTGC	11160
ATAATACCAAG	TTGTTGGATC	TAGGTAGTAC	CAAGTCGAAT	CATCGTTAT	CCACCCCGCA	11220
CGTCTTCAC	CACCAAGGTA	GTTTCTCCA	TTAATTTCCG	TCTTAGCTAG	ATAATACCAAG	11280
TTAGACTGAT	CATAAAGCCA	ACCTGTCTCT	AAAGAATGAT	TTTGATTAAA	GTAATAGTTC	11340
GTATAATAAC	GCTTCTCTTC	TTTATCTTCT	GAATCTTCAC	GTTTTCCCC	GTACTTTCTT	11400
CCAACACTGT	CTTTAGTTTT	AATCTCTAAT	GTTTTCCAAC	CAACAAACTC	TTGTAGCACT	11460
CCATTTTTAT	CGAAGTAGTA	CCACTCTGAC	TTTGGAAAAC	CTTCTAATCT	GATACCATT	11520
GGGTAAGGAC	CAATTGTACT	ACCTTTAGAT	GGAAACGGGA	TATATTGCCA	GCCGACAACC	11580
ATCTCTCCAG	ATAGAGAAC	AAAATAATAG	TACTTACCAT	CAATCACTCG	CCAGTAGGTT	11640
TCTTGAGGT	CCCCCTTTTT	GTAGTAGGTT	CTTCCGTTTT	CTTGGACAAA	CTGCCATCCT	11700
TCAGAACAT	CTGCAAATAC	TGTACTGGTC	CCTAGCAAAC	CAAAGAAAAA	TACTGTCAGT	11760
CCAACATTGCA	TAGTTTTTT	CAAATTTTC	ATCTATATAC	CCTCCAATAT	TAAATCCACT	11820
CACCAAGATGA	GGCGAAATTA	TAAACTTTAC	CATCGATAGT	TTGGCTACCT	GTAACCATTG	11880

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CTCCAGG

11887

(2) INFORMATION FOR SEQ ID NO: 147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 147:

CCGGTATGTT CTGGAATACT ACCAATCTAA GCTGGCTGTG CCCTACAGTT TTACAACCT	60
GTACGAATAC CTTAAGGAAT ATGACCGATT TTTCAGCTGG GTTTTGGAGT CTGGTATTTC	120
AAACGCTGAT AAAATATCCG ATATTCTTT ATCAGTTTG GAAAATATGT CTAAGAAAGA	180
CATGGAATCC TTTATCCTT ATCTACGTGA ACGTCCCTTG CTGAATGCTA ATACAACAAA	240
ACAAGGTGTT TCACAGACAA CTATCAATCG AACCTTATCA GCACHTTCTA GTCTTACAA	300
GTATCTAACG GAGGAGGTTG AAAACGATCA GGGGGAACCT TATTCTATC GTAATGTAAT	360
GAAAAAAAGTT TCCACCAAGA AAAAGAAAGA AACCCTTGCT GCCAGAGCTG AAAATATCAA	420
GCAAAACACTC TTTCTAGGTG ATGAAACAGA AGGTTTTCTA ACTTATATCG ATCAAGAGCA	480
CCCACAAACAG CTTTCAAATC GAGCTCTCTC ATCATTCAAC AAAAATAAAG AACGAGATT	540
AGCCATTATT GCCCTCTCT TGGCATCTGG TGTTCGCTTA TCTGAAGCTG TTAATCTAGA	600
TCTAAGAGAT CTCAATCTAA AAATGATGGT TATTGATGTT ACTCGAAAAG GTTGCAAAACG	660
TGACTCAGTC AATGTCGCTG CTTTTGCTAA ACCTTATTTA GAGAATTATC TGGCCATTG	720
GAATCAACGC TATAAACCGG AAAAACAGA TACAGCCCTT TTTTTAACCTC TCTACAGAGG	780
TGTTCCCTAAT CGTATCGATG CTTCTAGCGT TGAGAAAATG GTTGCTAAAT ACTCAGAGGA	840
TTTTAAAGTG CGTGTAAACAC CCCATAAACT GCGCCATACA CTAGCAACTA GGCTCTATGA	900
TGCGACTAAA TCACAAGTTT TAGTCAGTCA CCAACTAGGA CATGCTAGCA CACAAGTCAC	960
TGACCTCTAT ACCCATATTG TTAGTGTGTA ACAAAAGAAT GCTCTGGATA GTTTATGATT	1020
TTACGTATTT TAAATTATGT AAATAATAT CAAAAAAAGA AGTTGGCCAA CTTCTTTTG	1080
ATTTATCCAA CTACCGCTTC AGCGATTTCT TCACGGCTAA TACCAGCGAA GTAGCGTGTG	1140
ATATCAATGG TTTTAGCGC CTTAAGAACAA TCTTCGCGTT CGTATTCAC CCCACGAAGG	1200
ACATCTTCTA CTGCAGCAAC GTCTTCATA CCAAAGAAGT CACCATAAAT CTTGATGTCT	1260
TGGATTTTG ATTCAGTAAC GTTAGCAAAG ACTTCAACCT TACCACTAGT GAATTGATT	1320

986

CCACGACGGA CGTTAAATTC AGGTGATTAA CCATAGTTCC AGTCCCAAGT TCCAAACTTA	1380
GTATCCTTGA TCGGATTGAT TTGGCCAAT TCTTCTTCTG AAAAGACGTA TTCAGTCATC	1440
TCTGGGTACT CTTTTTTCAT GTATTCCAAG AGTAAATCAC GGAATTTC GACTGTGATT	1500
TTTTTGGTA ATTCATTGAT AATATTGGTT ACACGGGCAC GGACGGATT CACACCTTT	1560
GATTCAAATT TATCTTTGA AACCTTAAGG GCATTTGCGA GGACTGACAA ATCAACGTCA	1620
AAGAGCAAGC AACCGTGGTG CATGATACGG CGCTTGATAT AGGCTGGGC ATTGCCACAG	1680
AACTTCTTAC CATCAATCTC AAGGTCATTA CGACCTGTGA ACTCAGCTT AACCCCAAGT	1740
TGAGCCAGGG TATTGATAAC CGGAGTTGAG AAGCTCTTGA AGTCAAATGC CTTATTTCA	1800
TCTTCTTGG AGATGATCGT GTAGTTGAGG TTATTTAAAT CGTGGTAAAC AGCTCCACCA	1860
CCACTAATAC GGCAGACTAC CTCAATACCA TTTTGCAGA CATAATCACG GTTGATTCT	1920
TCGATAGTGT TCTGGTGACG ACCAACAAATG ATAGATGGCT TGTAAATCCA AAGTAGGAAG	1980
ATTTGATCCT CATCCAAAAG GTGTTAAAG GCGTATTCTT CCAAGGCAAT ATTAAAAGCA	2040
GTGTCATTG AATGATTGAT AATGATTTTC ATGATATCCC TTTACTTTAT ATGATAGAAA	2100
CTGGAAATAA CCTTCCAGTC TAATCTATCT TCGTTTTATT TTTTCTTAGG TGAATGGATG	2160
GCCATTCCCTA GAACATCTGC AAACGCTTCG TACATCACTT CAGAGTAAGT TGGGTGCCCG	2220
TGGATGGTCT TCAGCATTTC CTCAACAGTG ATTTCCATT CGATGATGCT TGATGCTTCG	2280
TTTATTAATT CTGCGGCTGC AGGACCAATA ATGTGTACAC CAAGGATTTC TCCGTATTTC	2340
TTATCAGCGA TAACTTTAC GAAACCTTGA GCTGCGTCAG ATGCAATAGC ACGACCCTTA	2400
GCAGCAAAGT TAAACTTACG GATGGCAACA TCGTATTCT CACGGGCTTG TTCTTCTGTC	2460
AAACCTACTG CTGCTACTTC AGGGAGAGTG TAGATGGCTG CAGGAGTCAG ATTCAATTG	2520
GCAACTGCAT GATTCCTTT AAGGGCATTT TCAGCGAAA CTTCACCCAT GCGGAAAGCT	2580
GCGTGAGCCA ACATCTTAGT ACCGTTGATG TCACCTGGTG CATAAAATGCC TGGAACTGAA	2640
GTTTCCATGT ATTGTTGAC CTTGATACAA CCACGATCCA ATTCAAACCTC AACCTCTCCA	2700
ATACCTTCAA GGTCTGGCAT ACGACCAATT GAAAGAAGAG CTTTGCTTGC GATGATATCG	2760
TCTTTCCATT CAACCTTGAT ACGAAGTTGA CCATTTCTT CAATGATTTT TTGCAGTTA	2820
GTACCAGTCA AGATGGTCAT TCCTTACGC TCAAGAATCA AGCGAAGGTT CTTAGAAACT	2880
TCCACATCCA TAGCTGGAAC TATACTGGTCC ATCATTTCGA TAACAGTCAC TTTGAACCA	2940
AATGTCATGA AGGCCTGACC GAGTCGATA CCGACAACTC CACCACCGAT GATAACAAGG	3000
CTTTCTGGCA CTTCGTTCAT TTCAAGAATG TCATCACTAG TCATGACAAG TGGAGATTCC	3060
ATACCAGGGA CGTTGATCTT GTTGACTTTT GAACCACCAAG CAAGAATGAT TTTCTTGGTT	3120

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TCAAGCAATT	CAGAACCAATT	TACCAAGACG	TTCTTGTCTT	TAGTGATTGT	ACCAATTCCCT	3180
TTATGAACAG	TAACCTCGTA	GCTACGAAGA	AGTCCTGCAA	CACCACCAAC	AAGAGTATTA	3240
ACAACCTTAG	ATTTAGTTTC	TAAAAGTTT	TCCATATCAA	CAGTGAAGTT	AGGATTTCA	3300
ATCACGATAAC	CACGATTTC	AGCATGACCG	ATATTTCAA	TAATTTCAGC	GTTATGAAGG	3360
TAGGTCTTGG	TTGGAATACA	TCCACGGTTT	AAGCAGGTT	CACCAAGTTC	AGATTTCTCA	3420
ACAAGGGCAA	CCTTACGCC	GAATTGGCA	GCTTTAATGG	CTGCAACATA	ACCAGCAGGA	3480
CCTCCACCAA	TCACAACGAT	ATCAAAAGCA	TCATCGCTCT	TACCATCATC	GTTTGAGGTA	3540
CTTGCTACAG	GTACAGGGCT	AGCTTCTGGC	GATGCTGCTC	CAGCTGTTGG	GATGTTTCC	3600
CTTTCTTCAC	CAAGGTAACC	GATAACTTCC	GTTACAGGGA	CAGTTTCACC	ATCTCCTTGT	3660
AGAATGGCAA	TCAAGTACCC	ATCTTCTTCG	GCTTCCAATT	CCATGCTGAC	TTTATCAGTC	3720
ATGATTTCCA	AAAGGATTTTC	TCCTTCTTTT	ACAAATTCTC	CGACTTTTTT	ATTCCATGG	3780
ACGATTTGTC	CTTCTGTAT	ATCCACGCCG	GCTTTGGCA	TAATTACTTC	TAAGGCCATG	3840
TCTTCCTTCC	TTTATCTATA	TCTTAAAAT	GAATACTCTT	GCTCTTAAAT	TAACATTGAG	3900
ATTGGCGTTT	CAATCAACTC	TTTCAAGTCC	TTCATAAACT	TAGCACCAGC	CATACCATCT	3960
ACGACACGGT	GGTCAATGGT	TAATCCTAAA	CTCATGATTG	GGCGAATCAC	AATTCACCA	4020
TTGACGACAA	CTGGCTTCTC	GATTGTCGAA	CTGACACCAA	GGATAGCTGA	GTTGGTTGG	4080
TTAATAATCG	GACCAAGGA	CTGAACACCA	AACATTCCA	AATTACTGAT	TGTGAATGTT	4140
GAATTTGTA	ACTCACTTGG	AGCCAATTAA	CCATCCAAGG	TACGGCCAAT	AACATCCTTA	4200
AAGGCTACAA	CCAGTTCTGA	AAGACTCATC	TTCTCAGCAT	TGTAAACAAC	AGGTGTATC	4260
AATCCATTAT	CCATCCCAAC	TGCCATGGCA	AGATTGACAT	AGTTGTGAGT	GATAATAGTC	4320
TTGCCATCTT	CTGTCAATGA	AGCGTTGATG	TATGGGTGTT	TCATAAGAGT	CTTAACAACT	4380
GCAAGCGAAA	GAAGGTCTGT	TACAGTAGTC	TTCTTCCCAG	TTGCTTCCAT	GATTGGCTCA	4440
AGAACCTTCT	TACGAAGAGC	CAACATTCA	GTCATATCAA	CTTCATAGTT	GAGGGTGAAG	4500
GTTGGCGCAG	TCAAGTAAGA	TTCAACCATG	CGTTGGCAA	TAACCTTACG	CATTGGTGTC	4560
ATTGGAATAC	GCTCGATTTT	ACCATATGGT	GTTACGTTAT	CAGGGACTTC	TTCCACTTTT	4620
TCAATCTGAG	CAGGAGATTT	GATGCTATCG	TTTCGATAT	TTTCAGGAAG	CAGGGCCAAA	4680
ACATCCTTCT	TCATGATTTT	ACCACGATGA	CCGGTTCCCTT	GGATTTCCCTG	CCAAGCAATG	4740
TTATGTTCGA	GGGCAATTG	TTTGCAAGT	GGCGAAATGC	GAACCACGTT	TGTGTCTTTA	4800
TAAGTTCCA	CGTCTTCTTT	GTGGACACGA	CCGTTGCAC	CTGAGCCAGA	AACGTCGTAG	4860

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AGGTTTATCC	CTAAATCATC	CGCTAACCTT	CTAGCTGCAG	GAGTCGCTCT	TAGCTTGTCA	4920
TCAGCCATGA	CCTCTCCAAT	TCTATTATG	ATACAAAGGG	CGTAAAAGC	GACTGAAAAA	4980
TAGGAAATCG	ACGATGGCTT	CGATGAAGCC	AAGGAGATTT	ATCTTTTTC	CGATCTTTA	5040
GCCC GTGCTC	TAATCTAAGA	TATTAATGAC	GAAGAGCTCT	GCACCTAAA	GATACAAAGT	5100
TTCTCGTCAG	CTTTATTTA	TTTACATAAC	TTATCTTATG	TAACCCTATT	CTTTGTTATA	5160
AGTTTTTCGG	ATTGCATCTT	TGATACTTTC	AACTGTTGGA	ATCATTGCAT	TTTCTAGGTT	5220
TTGTGCATAA	GGCATCGGCA	CATCTCTCC	TGCACAACGG	CGAATTGGTG	CATCTAGATA	5280
GTCAAATGCT	TCTGATCTG	AAATAATAGC	TGAAATTCA	CCGATATAGC	CACTTGT	5340
GTGGGCATCG	TTGACCAGAA	CAACCTTACC	AGTCTTCTTC	ACTGAGTTA	TGATGATATC	5400
CTTATCAAGC	GGAACAAAGGG	TACGTGGTCA	AACAATTCA	ACTGAAATTC	CTTCTCTGC	5460
TAATTCTTCA	GCAGCTTGAA	CCACACGGCG	AAGCATT	CCATAAGTAA	CAACTGTTAC	5520
ATCCGTTCC	TGGCGTTGA	TTTCACCAAC	CCCAAGTGGA	ATTGTGTAGT	CTGGATCAAC	5580
TGGCACTTCC	CCTTTTGGT	AAATTCTGA	CTTGTACTCA	AGTATAATAA	CTGGGTTGTT	5640
ATCACGGATA	GAAGACTTAA	GCAGGCC	CATGTCCGCA	GGTGT	GTGCCACAAAC	5700
CTTAAGTCCT	GGAATGTGAG	TAAACCAAGA	CTCTAGAGAT	TGTGAGTGCT	GGCGGCAGA	5760
GCCAACCTCCG	TTACCAGCTG	CACAACGAAC	AGTCATTGGA	ACCTGACCTT	TACCAACAAA	5820
CATGTAACGT	GT	TTTAGCAG	CTTGGTTGAC	GATATTGTCC	ATGGCAATAA	5880
CATGAAGGTC	ATATCGACGA	TTGGACGAAG	TCCTGT	CATG	GTGCTGCTCC	5940
AGAGATGGCA	GCTTCAGAAA	TCGGACAGTC	ACGGACACGT	TCTGGACCAA	ATTCTCAAG	6000
CATTCCAACA	GAAGTACCGA	AGTCTCCTCC	GAAGACACCG	ACGTCTCTC	CCATCAAGAA	6060
CACATTTCA	TCGCGACGCA	TTTCCTCAGA	CATAGCAAGG	ATAATGGTGT	CACGGAAGGA	6120
CATTGTTTT	GTTTCCATT	TATCTCTT	TCCTTAGTCT	GCGTAAATAT	CTTCAAAGGC	6180
TGATTCAAGC	GGTGGGAATG	GGCTTCC	TGCAAATT	ACAGAAGCTT	CTACTGCTTC	6240
CTTTACTTGC	GCTTGGATT	CTTCCAATT	TTCGGCAC	GCAATGTTAT	TTTCAATAAG	6300
GTAATTGCGG	AGGTTTCGA	TTGGATCTT	TTGTTCCAC	AATTCCACTT	CTTCACCGT	6360
ACGATATT	CCAGGGTCAG	ATGATGAGTG	ACCGAGCCAG	CGATAAGTTA	CACTTCAAT	6420
CAAGACTGGA	CCATTGCCAC	TGCGAACATG	GTCCACAGCT	TTCTGAAATC	CTTCATAGAC	6480
ATCGATGACA	TTGTTACCGT	CTTCGATGAA	CATTCCAGGA	ATTCCATAAG	CGGCGCTACG	6540
TTGATGGATA	TGTTCTATAT	TGGTCATT	CTTGATATCC	GCAGAGATA	CGTAACCGTT	6600
GTAAATGCAA	TAGAAAATGA	CTGGCAGGTT	CCAGATAGAA	GCCATGTTCA	CTGCTTCGTG	6660

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GAAAACACCT	TCATTGGTCG	CACCATCTCC	AAAGAAGCAG	ACAACGATTT	TACCGGTATT	6720
TTGCATTTGC	TGACTGAGGG	CTGCACCGAC	AGCGATCCCC	ATACCACCAC	CTACGATACC	6780
ATTGGCACCA	AGGTTCCCAG	CATCAAGGTC	AGCGATATGC	ATAGATCCAC	CTTTCCCTTT	6840
ACAGGTTCCA	GTGTATTTAC	CAAGGATTTC	AGCCATCATT	CCGTTGAGGT	CAATCCCTTT	6900
AGCAATAGCT	TGCCCCGTGTC	CACGGTGGTT	TGAGGTAATC	AGATCATCTG	GATTGAGAGC	6960
TAACATAGCC	CCCACGTTAG	CTGCCTCTTC	ACCAACAGAA	AACTGCGTCA	TTCTGGCAC	7020
TTTCCCTTTC	TTTACTAATT	GTGCAATTTC	AAAGTCCATG	CGACGGATTT	CTTCCATCTT	7080
ACGGAACATT	TCTAGCAAAA	GATTTTATC	AAAGTTGAC	ATCTTCTTGC	CTTTCTAACT	7140
TTCTTCTTAC	CTTACTATTT	TACCGCTTTT	GGCAAATACT	GTCAAAGTTT	TTCTAAAAGA	7200
AATTTCACAA	AATAAAAAG	AAACCCCGT	AAAACAAGG	GATTTTCTTG	TCAAGAATAT	7260
TTTTTCACAA	ACTTTTTAGC	ATTTGGATTT	TGCTAAAGAT	TCAAATCTCT	TCATAATCAC	7320
AGTTAAACCG	CAACGGTAGA	GCGCCCCGCT	CACAATCAA	CTAATAATCA	AGCCGATCCA	7380
GTAAGAATAA	GCTCCAAAAT	CTGTTAGGGA	ATCAAATAGC	GTAnCACAGG	GATTGCTACG	7440
CCCCAATAAC	CAAGCAAACC	AAGGTAAAAA	GAATAACTG	TATCCTTATA	CCCCCGCAAA	7500
ATTCCCTGAA	GCGGCGCCGC	AAAGGTATCT	GCTAACTGGA	AGAAAAGACT	ATAAGTTAAA	7560
AAACGCACTG	TCAAATCGAT	AAATTTGGG	TCGTTACCAT	AAAGACTGGC	CACATTCCC	7620
CTAAAATGT	AAAGGAAGGT	TAAGGTGAAG	GCCGCAAAAA	TGAGGGCAGT	CCATCTTCCT	7680
AGACCAATAT	AGGTTTCGC	ATCATCAAAT	CGCTTGGCTC	CCACTTCATA	GGAAACGACA	7740
ATAGCCATAG	CCGATGAGAT	ACTCATAGGA	AAGGCGTACA	TAAGACTTGA	AAAGTTCTATA	7800
GCTGACTGGT	GACTAGCTAT	AATCAAGGGC	AAAACCTAG	CCATAATCAA	GCCAACCACT	7860
GAAAAGATAG	CCACTTCCGC	GAAGACAGTT	CCCCAATAG	GCAGACCTAA	ACGAACCTCCT	7920
TCCTTAATT	TATCCATATT	AAGTGGATT	CGTTTCTCAA	GGTGTAAGGC	TTTGAGCTTC	7980
TCCTGTTAA	ATAAAACAG	AACAGAAATC	CCAAGCAAGA	CCCAGTAGGC	CAAGGATGTT	8040
CCTAAACCAAG	CACCAGCCCC	TCCCAGTTCT	GGAACACCAA	AGGCACCGTA	AATCAAGAGA	8100
TAGTTAAATC	CGCTATTGAG	AGGGAGTAAC	AAAAGCATGA	GGTACATGGA	CAGTTGGTC	8160
AAGCCCAGCG	AATCCAGCAA	GGAACGAATG	ACGCTAAAGA	GCAACAAAGGG	GATAATCCCG	8220
ATAGATAAAA	ACCAAAGATA	GCGAACCGCT	ACTGCCGCTA	CTGCTGCTTC	TAACCCAATA	8280
TGATTCAAGA	TTATTGGTGC	CAAGAAAAGT	ACCATCCCCA	GCAAGACCAC	AGATAGGCC	8340
AAGGCCAAAT	AAATAAATTG	GTAAAATCA	GACGCAACTT	CTTCCTTTT	GCCTCGACCA	8400

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AGATGGTGAC CAATGATAGG CACCAAGGCT GACACAATCC CTGTTAGAAA TGTAAAGAAA	8460
GGATTCCAGA TACTGGTTGC CATAGATACA CCAGCCAAGT CCATAGTGTGTT GTATTGACCT	8520
GTCATTGCAG TATCAACAAA AGAGGCAGAA TAATTGGCAA ATTGGTAGAT CAGGATTGGG	8580
AAGAAAATTT TTAAAATAA TACTAACTTC TCTCGTAAAC ACTTTGTCTT ATACATACTT	8640
CTCTTTCTAT TCTGATTAT CTAAACCAAAGAGTTTCAGA CCATAGTTTT TCAAACCTAG	8700
CGGAGGTTA TTAGATTTCAGA AAGTAGTATG CCAACACGCA CATGTACGAC AATAATAGCT	8760
TCTAACTAAA CCTCCGTTAT CATATTGAAC CGCATGGTCA GCTTTTCTT TAGTTTCATA	8820
TTGAATTTG GAACGATTAG CTGCGGGACA GTAAATTCCA CTATTAGATT TCGCTTGTCT	8880
CTCCCTACGT TTTCGAAAAAT AATTCACTATT CTAACCTCCTA TCAAGCTTGA TAGACGATTT	8940
GTCCCTTACA GATGGTATAT TTAACCTGCC CTTTTAAGGT TTCACCGATG AATGGTGAAT	9000
TAGCTGCTT GGAAGCAAAA TGGGAGTCCA CAAAGCGGTC AGCCTTGGCA TCAAAAATAG	9060
TGATATCTGC TGGACCATTTC TCAGCCAAGT AACCTGCTTC AAAGTTGTAA AGCTTGGCTG	9120
GGTTGTATGT CATTTCATCA AGTAATTCCA TCAAGCTCAA CTCACCAGCT TCTACTAAAT	9180
AGGTCAAGCT GAGAGACAGG GATTTTCTA AGCCAGTCAT ACCAGATGGC GCTTTGGTAA	9240
TATCCTCAAC ATTTTTTCA TCTACATGAT GAGGCGCGTG GTCAGTCGCA ATAACGTGTGA	9300
TGACACCTGA TTTGAGACCT TCGATAACGG CACGACGGTC TGATTCCAAA CGAAGCGGTG	9360
GATTCTCATCTT AGCATTGCTA CCTTGTGTTA AAAGAAGTGC TTCTGTCTTA GAGAAATGCT	9420
GTGGCGCTAC TTCTGCTGTG ACTTCTGCAC CTAACCCCTG AGCAAACCTCC ACTACTTTAA	9480
CACTTTCTTC CTTAGACAAA TGCTGGATGT GAACATGGGC TTTAGTTGCA TAGGCAATCA	9540
TGACATCAGC CGCCATCATA GCGTACTCAG CCACCCCGAT AGCACCGCAG ATATGAAAT	9600
GTTCTCTAGC AATATTTCA TTAAAGCCAA GAACACCGTT CAAACCTGGA TCTTCCTCAT	9660
GAAGGCTGAT AAAGGTATTG AGTTTTTGG CTTCCCTCCAT GGCTTCCCTG ACAATCTTAC	9720
TGCTCTCAAG CGGAATACCG TCATCAGAGA AACCAACCGC ACCAGCTTCT AAGAGTGCCT	9780
TAAAGTCAGT CAAGTTTTA CCATTAAGT TTTTAGTAAT GGTCGCAACT GTCTTGACAT	9840
TAATCTTCTC TTTGGCAGCT GACTGGAGAA CTGCTTGCAA AGTCTCCACG TCTGAAATGG	9900
TTGGACTGGT ATTAGCCATC ATGACGACAG TAGTAAAACC ACCTGCAGCG GCTGCTAGGG	9960
CACCAAGTATG AATGTCTTCTT TTATGTGTTT GACCAGGTTTC ACGGAAATGA ACATGAATAT	10020
CGACCAAGCC AGGAGCAACC ACAAGACCAAG TAGCATCAAT CGTTTCTGCT CCTTCTTCCG	10080
TGATCTCAGA CGCAATTTCAGA ATAATTTCC CACCTTGAAAC TAAGACATCA CAAACTTGAT	10140
CCAAACCAGA CTTGGGATCC ATTACACGAC CATTTCAGAT TAGTAGCATC TGCTTCTCC	10200

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TTTATTCTATA GAAATCAACT TGGGTATCCA ACAATTATC CCCATCATAA ACAAACTTGG	10260
CTGAAAAGAA GGGTTTATCC TCTAAAAGCC ACTCAACAAA GGTGTGGTCA CCTTCCCAAG	10320
TCGGCTTGCT CAAAACCTCA TCATAGGAA CCCATTCTAG CGTCCCCTCA TTGCAGTCAA	10380
TCAAGTCGCC CTCAAACTCC GTCAACCTTAA AAACATAGGT GTACCAGTCT AAATCTGGT	10440
TAAATTCAAG AAAAGTGTG ACACCTTTA GAACTGGCTT GGCTTTGAGC CCTGTTCTT	10500
CAAGGATTTC ACGCGCCGCG CATTCCCTGGG GCGTCTCTCC TCTCTCTAGC TTACCACCCA	10560
CACCAATCCA TTTCCCTTCA TGGACATCAT TGGGTTCTT ATTACGATGG AGCATGAGCA	10620
GTTCTTCCC ATTATCAATG TAGCAAATCG TCGCTAACTG AGGCATATT TCTCCTTATC	10680
TAAGCCAATC GATTGGCTCT TGTCCGTCT CTTTAAGAA TGCATTGGCC TTGGAAAAGG	10740
GCTTGGAAACC CCAAAATCCT CTATAAACCG ACAAAAGGACT TGGATGGGCT GATTCGATAA	10800
TCAAGTGATG AGGATTGGTA ACTAATGCCT TCTTCTTACG TGCATAAGCT CCCCAGAGTA	10860
CAAAAACGAC TGGTCTATCT AGATGATTGA CCACCTGAAT CACAGCATCA GTAAAAGGCT	10920
CCCAGATTG ACCAGCATGA CCATTGGCCT GTCCAGCAGG AACAGTCAAA CAAGCATTAA	10980
GAAGCAAGAC TCCTTGCTCA GCCCAAGCTG TCAAATCATG AGATTCTTA ACTCCGATAT	11040
CATCTGACAA TTCTTTCAAG ATATTTGCA AGGATGGTGG AGCTGGGATA GAGTCAGGTA	11100
CAGAAAAACT CAAGCCCTGC GCTTGACCTG GTCCGTGATA GGGGTCTTGC CCTAGAATT	11160
CCACCTTAAC TTCTTCAAGC AGTGGTGTCA AGAGAGCCTG AAAAACCTT TCCTGGGTG	11220
GATAAATAAT CCCCTGAGAA TAGACCTGCT CCATAAACTG ATTGATTTTC CCGAAATAAC	11280
CCTCAGGTAA TTGCGCCTTA ATCAAAGCAT GCCAAGACGA GTGTTCCATA GCCGACTCGG	11340

(2) INFORMATION FOR SEQ ID NO: 148:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12127 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 148:

AAAAAAATAGA CTTGTTAGAC TATAATGTA GTAAGCCTAC ACAAGAAAAA TACATAGAGA	60
TAAAGGTGAT TATTATGAAA TTCAAAAAAA TGCTTACTCT TGCAGCCATT GGCTTATCAG	120
GATTTGGGCT TGTTGCCTGT GGCAATCAGT CAGCTGCTTC CAAACAGTCA GCTTCAGGAA	180
CGATTGAGGT GATTCACGA GAAAATGGCT CTGGGACACG GGGTGCCTTC ACAGAAATCA	240

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CAGGGATTCT CAAAAAAGAC GGTGATAAAA AAATTGACAA CACTGCCAA ACAGCTGTGA	300
TTCAAAATAG TACAGAACGGT GTTCTCTCAG CAGTTCAAGG GAATGCTAAT GCTATCGGCT	360
ACATCTCCTT GGGATCTTTA ACGAAATCTG TCAAGGCTTT AGAGATTGAT GGTGTCAAGG	420
CTAGTCGAGA CACAGTTTTA GATGGTGAAT ACCCTCTCA ACGTCCCTTC AACATTGTTT	480
GGTCTTCTAA TCTTTCCAAG CTAGGTCAAG ATTTTATCAG CTTTATCCAC TCCAAACAAG	540
GTCAACAAGT GGTACACAGAT AATAAAATTAA TTGAAGCTAA AACCGAAACC ACGBAAATATA	600
CAAGCCAACA CTTATCAGGC AAGTTGTCTG TTGTAGGTTTC CACTTCAGTA TCTTCTTTAA	660
TGGAAAAATT AGCAGAACGCT TATAAAAAG AAAATCCAGA AGTTACGATT GATATTACCT	720
CTAATGGGTC TTCAGCAGGT ATTACCGCTG TTAAGGAGAA AACCGCTGAT ATTGGTATGG	780
TTTCTAGGGA ATTAACCTCCT GAAGAACGGTA AGAGTCTCAC CCATGATGCT ATTGCTTTAG	840
ACGGTATTGC TGTTGTGGTC ATAATGACA ATAAGGCAAG CCAAGTCAGT ATGGCTGAAC	900
TTGCAGACGT TTTTAGTGGC AAATTAACCA CCTGGGACAA GATTAAATAA AATGTTGCT	960
CCATAAAATCT CTAAAGAGAT GCAGACGTTT CATCGTACAA TAAGATAAAG AAGGCAAGTA	1020
GGGAGGTGTC GTATCTCCCT TACTTTCTTC ACTAGAAAGG ACAAGATGTG ACAAAACAAG	1080
CCTTCAAAGA AGCAGTTTTT AGGGCAATT TTTCATGAG TGCAACAGTA GCTGTTGTAG	1140
CTATTTGCT AATCTGTTTC TTTATTTTTA GTAATGGCTT ACCTTTCATA GCTAACTACG	1200
GCTTTGCCCG TTTTTTATTAA GGCAAGTGATT GGTCGCCAAC GAACATTCCG GCAAGCTATG	1260
GTATTTTACC AATGATCGTT GGTTCCATTAT TAATTACCTT AGGAGCGATT GTGATTGGGG	1320
TGCAACACAGG CATCTTGACA TCGGTGTTA TGTTTATTAA TTGTCAAAG CCCGCTATG	1380
GCTTCTTAAA ATCAGCTATC AACTGATGG CAGCCATTCC ATCTATTGTT TATGGTTTTT	1440
TCGGCCTACA ATTATTGGTG CCTTGGATTA GAAGCTTTT AGGAAATGGC ATGAGTGTCC	1500
TAACCGCTTC GTTACTATTAA GGAATAATGA TTTTGCCAAAC CATTATCAGT TTGTCAGAAT	1560
CTGCTATCCG AACAGTTCCC AAAACGTATT ATTCTGGTAG CTTGGCTCTA GGAGCTAGTC	1620
ATGAACGGAG TATTTTTAGT GTCATCTTGC CAGCTGCGAG ATCTGGTATT TTATCAGCAG	1680
TTATTTAGG AATCGGTCGC GCAGTAGGTG AAACCATGGC AGTTATTTG GTGGCAGGCA	1740
ACCAGCCGAT TATTCCAAGT GGACTCTTT CAGGAACCAG AACCTTAACA ACCAATATTG	1800
TTCTGGAAAT GGCTTACGCA TCAGGTCAAGC ATAGGGAAGC CCTTATTGCA ACCTCAGCAG	1860
TTCTCTTTT CCTTATTCTC TTGATTAATG CCTACTTTGC CTACTTGAAA GGAAAATCAT	1920
CTTATGAGTA AATACCTGCT AAAACTCTC GTTTATTGTT TTTCAGCTTT AACCTTGGC	1980
TCTCTCTTT TAATCATTGG TTTTATCCTC ATCAAAGGCT TACCTCATCT AAGTCTATCC	2040

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CTCTTTCTT GGACTTATAC TTCTGAGAAC ATTCCCTTA TGCCAGCGAT TATTTCCACC	2100
GTTATTCTGG TCTTGGTGC TCTTCTTTA GCCTTGCCCA TAGGGATTTC TGCTGGTTTT	2160
TATCTTGTGG AATATACAAA AAAAGATTCC CTTTGTGTTA AAATCATGCG ATTGGCCTCA	2220
GATACCTTAT CTGGGATTCC TTCCATTGTT TTTGGTCTGT TTGGCATGCT CTTCTTGTA	2280
GTCTTCTTAG GTTTCAATA CTCTCTGTTA TCAGGAATCT TAACCTCAGT TATCATGGTG	2340
TTGCCAGTCA TTATTCGCTC AACAGAAGAA GCCCTTTAT CTGTTAGTGA TAGCATGCGT	2400
CAAGCAAGTT ATGGACTTGG GGCAGGTAAG TTACGGACTG TTTTTAGAAT TGTTCTACCA	2460
GTTGCCATGC CAGGTATTT AGCTGGAGTG ATACTAGCTA TTGGCCGTAT CGTTGGTGAA	2520
ACAGCTGCCCT TCATGTATAC ATTAGGTACC TCTACCAATA CGCCAAGTAG TCTCATGTCT	2580
TCAGGCCGTT CTCTAGCCCT ACATATGTAT ATGCTGTCAA GTGAGGGGCT ACATGTCAT	2640
GAAGCCTATG CTACCGCCGT GATTTTGATT ATTACTGTTT TAATGATAAA TACTCTATCA	2700
AGCTTATTAT CTCGAAAATCT TGTGAAAGGA GCTTCCTAGT ATGGGAACAT TTTCAGTCAG	2760
ACACCTAGAC TTATTTACG GGGATTTCA AGCCTAAAAA AATATTCGA TTCAATTACC	2820
AGAAAGACAG ATTACTGCCT TGATAGGCC ATCTGGTTGT GGCAAATCAA CTTTCTAAA	2880
AACCCCTAAC CGGATGAACG ATTTGGTCC TTCTTGCCAT ATTGAAGGCC AAGTCCTCTT	2940
AGATGAGCAA GATATTTATA GTAGCAAATT CAACCTTAAT CAGCTACGTA AGCGTGTAGG	3000
GATGGTTTT CAACAGCCTA ATCCCTTGCA CATGTCTATC TATGATAACG TGGCTTATGG	3060
CCCAAGGACA CATGGTATTC GAGACAAAAA ACAATTAGAT GCCTTAGTGG AGAAATCTTT	3120
AAAAGGGGCA GCCATTTGGG AAGAAGTCAA AGATGATCTT AAAAAGAGTG CCATGTCCTT	3180
ATCTGGCGGT CAGCAGCAAC GCCTTGCAAT TGCGCGAGCT TTAGCAGTAG AACCTGATAT	3240
TCTGTTAATG GATGAGCCGA CTTCAGCCTT AGACCTATC TCCACTTAA AAATTGAAGA	3300
CCTCATTCAAG CAACTAAAAA AGGATTATAC GATTATCATT GTTACCCATA ACATGCAACA	3360
AGCTTCACGT ATTCAGATA AAACTGCTTT TTTCTTAACA GGAGAAATTG GCGAATTGG	3420
AGATAACCGTT GACGTGTTA CCAATCCAAA AGATCAGCGC ACAGAAGACT ATATTCAGG	3480
ACGGTTCGGA TAAGGAAGGA AAAACCTATG AGAAATCAAT TTGACTTAGA ATTGCATGAA	3540
TTAGAACAAAT CCTTTTTAGG ACTAGGGCAA CTGTCCTTG AAACAGCTTC AAAAGCCTTA	3600
CTGGCCTTAG CCTCCAAAGA CAAGGAGATG GCAGAGCTAA TTATCAATAA GGATCATGCT	3660
ATCAACCAAG GTCAAAGCGC TATCGAATTG ACCTGTGCC GTTGTGTC CTTGCAGCAG	3720
CCACAAGTGT CTGACCTTCG ATTTGTGATT AGCATCATGT CTTCTTGTC AGACCTTGAA	3780

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CGTATGGGAG ACCATATGGC AGGCATTGCC AAAGCTGTT TGCAACTAAA AGAAAATCAA	3840
CTAGCCCCCTG ACGAAGAACAA GTTACACCAA ATGGGTAAAT TATCCCTCAG CATGCTAGCC	3900
GATTTATTGG TTGCCTTCC TTTGCACCAA GCCTCAAAAG CTATTAGTAT TGCTCAAAAA	3960
GATGAACAGA TTGACCAATA TTATTATGCC TTATCAAAGG AAATCATGG ACTTATGAAA	4020
GACCAAGAAA CCTCAATTCC CAATGGAAC CAATACCTTT ATATCATAGG GCATCTGGAA	4080
CGCTCGCTGA TTACATTGCT AACATTTGTG AACGCCTAGT CTACCTAGAA ACAGGAGAAC	4140
TAGTGGATTG GAATTAATTC AACTAATCCT TAAAAGAGAA GAGTACGATT AAGTACTCTT	4200
TTTTATGGTT GTAAAAAAAGT TCATTTGACC AATTAAAGCA GTGTAGATAG TGAGGAGTTG	4260
TTTCAATTCT ATCGTGAACG AGGGAAATGCT GAAAACCTTA TCAAAGAAAG GAAAGCAGGA	4320
TTCTTTGGGG ATAAGACAGA TAGTCGACC ATGATTAAGA ATGAAGTACG TATGATGATG	4380
GGCTGTCTGG CTTATAATCT CTACCTCTT TTAAAGCAGC TAGCTGGTGA TGAAGTAAAG	4440
TCCTTGACTA TCAAGCGTTT TCGACGTCTC TTCCCTCATA TTGCCGGAAA ATATGCTCT	4500
ACTGCTAGAC GACATATTCT CAAATTCTCA AGTCTATACG CCTATTCAAACAGTTCAA	4560
GCCTTATTG ATACAATCTG CCAGATAAACT CTGATACTCC CTGTTCCATA TAGAGCTAGA	4620
GGGCAGGGGG AAACATGCCT AACAGAATAA GTCACCTTAT TTAAAAAAATC GAGCATCAA	4680
CCAAGGGAGG AGTCTGCCCT TTTTTAGGAA AAAATCAAGA CAAATCTCCT CAATTATGTC	4740
TCGAACATCA GAAATTAAGC AAAATCACCA GAAGGACAGT ATTTCAACTA GCTTTCTGG	4800
TAATTTTTGA ACTGTGTAGT TCGTTAGTGC CAGATATGAA TAATTTGGGA TGATAAAATCT	4860
TTCTTCCTCA GGTAGCCTAT CATAATACTC TTCAAAAATC TTATCAAAAAA CACTCTCTT	4920
CTTTTGGGCG ATAGTTTCAT CTTCGTATGT AGGAGTCCTC ATCAAGAAAT ACTTCAATTCT	4980
TAGGTATTCC TTATCCAACCT CTATATAACT TGGCATCAAC TTGTAATCTT CAACCCCCAA	5040
ACGTTCAGCA ATATATTTTA ACTTTGTTAG TATTGGTCTG GATTCTCCAT TTTCAAATTCT	5100
AATTAATTGA CGGATACTTA ATTCAGACTC ATCACCACAA AATTCTGAAC GACTGATT	5160
TTTAGCCAAA CGTAATCTTT TAATTTTTTC GCCAAACTCT CGCAACCTAC AAGAACTTCC	5220
TGAGTTGTTT ACCTCTATTA TAAGCATATA CTGAATCAAATCTATCA GATTCTTCT	5280
CACTTTAACT AAAGACTAAG AGTTTATCCC TTCGTCTCGG TTTTTGTGTA TTTTCCACC	5340
ATACCCAGT AATGCAAGTG CAAAATCCCC TAGAATATGA TAGAATAAGA GAAAGAACTC	5400
TATCAAGGAG GAAATCATGG AAAAACAAAC CGTCGCCGTC TTGGGGCCTG GTTCTTGGGG	5460
AACCGCCCTT TCACAAGTCT TAAATGACAA TGGACACGAG GTACGTATTT GGGGAAATCT	5520
TCCCGAGCAA ATCAATGAAA TTAATACACA CCATACTAAT AAGCACTACT TTAAAGATGT	5580

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CGTTCTAGAC GAAAATATCA TTGCCTACAC CGACTTAGCA GAAACATTGA AAGATGTGGA	5640
TGCGATTTG TTTGTTGTC CAACAAAAGT GACACGACTT GTTGCCAGC AAGTTGCACA	5700
AACCTTGGAC CATAAGTTA TCATCATGCA CGCATCAAAG GGATTAGAAC CTGATAGCCA	5760
TAAACGATTA TCAACCATTG TTGAAGAAGA AATTCTGAA CATCTCCGT GTGATATCGT	5820
CGTTGTTCA GGGCCTAGTC ATGCAGAAGA GACCATTGTG CGTGACCTAA CTTTAATAAC	5880
TGCTGTTCT AAAGATTTCAC AAACAGCTCA ATACGTTCAAG AAGCTATTAA GTAATCACTA	5940
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TATTATTGCT GTCGGTGCTG GAGCTTACA TGGCTTGGA TTTGGTGATA ATGCTAAGGC	6060
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TCCATTGACC TATAGCGGCT TATCTGGTGT GGGGAGATTG ATCGTAACGG GAACTTCCAT	6180
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AGCCAAGAA CTTGGAGTCT ATATGCCAT TACACAGGCT ATTTACCAAG TTATTATCA	6360
CGGAACCAAT ATCAAAGATG CCATTTATGA CATCATGAAC AATGAATTAA AAGCAGAAAA	6420
TGAGTGGTCT TAACCCCTCA TAGAAAGGAT TTTTATGACA TCAAAAGTTA GAAAGGCAGT	6480
CATCCCTGCT GCTGGACTAG GAACTCGATT TTTACCAGCA ACCAAGGCC TTGCCAAAGA	6540
AATGTTGCCA ATCGTAGACA AACCAACTAT CCAGTTTATC GTGAAAGAAG CTCTCAAATC	6600
AGGTATTGAA GATATTCTAG TTGTCACTGG TAAATCAAAA CGTTCTATTG AGGACCACTT	6660
TGATTCAAAC TTGAAATTGG AATATAACCT CAAAGAAAAA GGGAAAACAG ATCTTTGAA	6720
GCTAGTTGAT AAAACAAC TG ACATGCGTCT GCATTTTATC CGCCAAACTC ATCCACGCGG	6780
TCTCGGAGAT GCTGTTTGC AAGCCAAGGC TTTCGTCGGA AATGAACTT TTGTCGTTAT	6840
GCTTGGTGAT GACTTGATGG ATATCACAGA CGAAAAGGCT GTTCCACTTA CCAAACAACT	6900
CATGGATGAC TACGAGCGTA CCCACGCGTC TACTATCGCT GTCATGCCAG TCCCTCATGA	6960
CGAAGTATCT GCTTACGGGG TTATGCTCC GCAAGGCGAA GGAAAAGATG GTCTTTACAG	7020
TGTTGAAACC TTTGTTGAAA AACCAAGCTCC AGAGGACGCT CCTAGCGACC TTGCTATTAT	7080
CGGACGCTAC CTCCTCACGC CTGAAATTGG TGAGATTCTC GAAAAGCAAG CTCCAGGTGC	7140
AGGAAATGAA ATTCAAGGGG CTCGTTACGA TGTGGAGAC AAGTTGGCT TCATGAAAC	7200
TGCTCGTGAG TTCAAAGGGG CTCGTTACGA TGTGGAGAC AAGTTGGCT TCATGAAAC	7260
ATCCATCGAC TACGCCCTCA AACACCCACA AGTCAAAGAT GATTGAAAGA ATTACCTCAT	7320

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CCAACCTGGAA	AAAGAATTGA	CTGAGAAGGA	ATAACAAAAT	CATTTATATA	AAGATTAGCC	7380
ACACATAAAAT	TAAGTAAATT	CTCTACTTGA	ATCTACCTAT	TTAATAAAAA	CTAATGAAAA	7440
CGCTATACTT	GTATTTGTTT	TTTCATTAAA	ATAAGAGTAG	AATAAATTAG	TATAGTAAAA	7500
CAAAAAGCA	CCGAATCGGT	GCGCACTTTT	TCAAGTTGTG	TACGGACAAA	GCCTTATTTT	7560
AACTTTGCTA	TGTTGTTCT	AATGGTTCCA	AAATAATAAA	TAATTTAAA	TTTGACTTAA	7620
CTGTTGGAGT	AGTCATGGTT	AAATTAATC	AACCGAGCCG	AACATAAGTT	GTTTAATTTT	7680
GTGGAAGCTA	TTAATAAAAA	TATAATAAGG	GAGAAAGATA	GGTGTAAATT	TAATTTAAA	7740
GTAATTGCGG	ACACTATCAA	AGAAAAAGAT	TATGGAGAAC	AAATTTGTAG	AATTTATCGA	7800
AAACAATAAA	AAAGTAATCA	TTTCATCAGT	TCCAGTTGGT	GTTGTATTGG	TATTAGGGTT	7860
TGGATGGTAT	TCATATAACC	AACAACAAGC	AGAACAAACAA	GCAAAAATTG	TACAATTAGA	7920
AAAAGATAGC	AAATCAGACA	AAGAACAAAGT	TGATAAACTA	TTTGAATCAT	TTGATGCATC	7980
TTCAGATGAA	TCTATTTCTA	AATTAAAAGA	ACTATCTGAA	ACTTCACTTA	AAACCGATGC	8040
AGGTAAAGAC	TATCTTAATA	ACAAAGTCAA	AGAACATCT	AAAGCAATTG	TAGATTTCA	8100
TTTGCAAAAA	GGTTTGGCTT	ATGATGTTAA	AGATTCAAGAT	GACAAATTAA	AAGATAAAAGC	8160
AACTCTTGAA	ACAAATGTAA	AAGAAATTAC	AAAACAAATT	GATTTTATCA	AAAAAGTTGA	8220
TGAAACCTTT	AAACAAGAGA	ATTTGGAAGA	AACTCTTAAA	TCTCTAAATG	ATCTTGTGAA	8280
TAAATATCAA	AAACAAATCG	AACTTTGAA	GAAAGAAGAA	GAAAAAGCTG	CTGAAAAAGC	8340
TGCTGAAAAA	GCAAAGGAAT	CTTCTAGTCA	AAGTAATTCT	TCTGGTAGTG	CTTCTAATGA	8400
GTCTTATAAT	GGATCTTCCA	ATTCAAATGT	AGATTATAGT	TCATCTGAAC	AAACTAATGG	8460
ATATTCAAAT	AATTATGGCG	GTCAAGATTA	TTCTGGTTCA	GGAGATAGTT	CAACAAATGG	8520
TGGATCATCA	GAACAATATT	CATCTAGCAA	TTCAAACAGC	GGAGCAAATA	ATGTCTACAG	8580
ATATAAAGGC	ACTGGTGCTG	ACGGCTATCA	AAGATACTAC	TACAAAGATC	ATAATAATGG	8640
AGATGTGTAT	GATGACGATG	GAAATTACCT	TGGGAACCTT	GGTGGCGGCA	TTGCAGAAC	8700
TAGTCAACGCC	TAATAACTAT	TTTAGAGCTG	TGTTGTTTCG	AATGGTTCCA	AAACACATTA	8760
AAAGCTACTC	ATTTTTAAG	TAGCTTTTTT	CTTATTCAAG	TTTACATATT	ATACTCAATG	8820
AAAATCAAAT	TCAAACCAACG	TCAGCATCGC	CTTACCGTAG	GTATGGTTAC	TGACTTCGTC	8880
AGTTTCATCT	ACAACCTCAA	AACCATGTTT	TGAGCTGACT	TCGTCAGTTC	TATCTACAAC	8940
CTCAAAGCAG	TGCTTTGAGC	AACCTGCGGC	TAGCTTCCTA	GTTTGCTCTT	TGATTTTCAT	9000
TGAGTATTAG	TCGTCACAAAT	CCCATTCCCT	TGTAGAAAAG	CAAATGGCG	AGTCCTACGA	9060
ACAAGACTAC	CGCTCCTAAT	CTCTGGCTGG	TGTTATACAT	CCGTTTTCT	CCTCTAACTG	9120

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GAAAGATAAC	TGCTAGAAAT	GCGCCACCAA	CTGCACCACC	GATATGGCCT	GCTAGGCTGA	9180
TTCCTGGAAT	CAGAACACTT	CCAATAATGT	TAACCACAAA	AAGTGTCAGA	TAGGATTGCC	9240
CTAGCTGTTG	GATATAAGGA	TTGCGAGTTG	CATAGCGAAG	AAACAATAATC	GGGGCAAATA	9300
GCCCATAAAAG	AGAGGTAGAG	GCGCCTGCTG	CTAAGGATT	AGGACTAAAT	ACAAAAACAA	9360
AGAGATTGCC	CATCATTCCCT	GATAAAAGAT	AGAGAAAGAA	AAACTGCTTA	GAACCGAAAA	9420
TCTCCTCTAC	CTGCCTTCCA	AGATAATAAA	GTGAAAGCAT	ATTAACAATG	AAATGTTCCC	9480
ACCCAATATG	AACAAAAATG	GCAGACAAGA	GACGCCAAC	CTGCTCGGG	AAGAGGCAGA	9540
TAGCTGGCCC	ATACATGGCT	CCAAATCGAA	ATAATGTATC	TGCCCTGTCA	AAGTTCCGC	9600
CTGCAGTGAC	CAACATTAGT	AAAAATACCA	AGGCCGTAC	TAAGAGGAAG	AAACTCGTCA	9660
CAGGGTAACG	TCTATCAAAG	ATTTCTTCA	TCAATTATA	CCTCCTGAAC	AGGAATATCA	9720
TGGTTTCAG	GTATAAAGTC	CTGAATTG	CAAGGATATA	TCGTA	CTCAA AGTACGACCA	9780
GAAAAATGTT	CCAGATAGCG	GTCATAATAG	CCTCCACC	GT	ATCCTATCCG ATATCCTT	9840
GTCGTAAAG	CCAGACCAGG	AACATGAATC	AAATCAATCT	GAGATGCATC	CACCACTTCC	9900
AAATCTCCCT	GTAGCTCCAG	TAAGGCAAAG	AAAGTTTTA	CCAACTGTTG	CGGATCATAG	9960
ACCACAAAGT	CCATGCGCCC	CTTGGGATAA	GT	TTGGT	TTAAACCTT CTTGCCGTCC	10020
TTCAGCGCCT	GCTCAATCAG	TTCTGCGTT	TGAAACTCAT	GAGAAAAGA	GAGGTAGGTT	10080
GCGATGACCT	TGGCTCTTG	ATAAAAGGGG	TGTTGTAAAA	GCCGCTCGGT	TAAAGCTTGG	10140
TCTATAGCCT	GT	TTTGCTC	TTGAGATATA	GCCTTCATT	CATGCAAGAC TTGCTTGCGT	10200
AATTCCGATT	TCATAGACAA	GCCCTCTATT	CTGCTGCC	TTTTTTCA	AAACTAGACA	10260
CCGCAGCCAC	CCCAATAGCT	AAGACTTCTT	CCTTAGGACT	CATT	TGAGG TGATGAAGAG	10320
CGTAGGGACT	ATCGATACCT	AGCCAAAACA	TCACGCCATC	AACTTTGAA	AGGAGATAAC	10380
CAAAGTCCTC	GCCTGTCATA	GCAGGTTCGA	TATCAATCAA	CTCGATTCCG	TCTTTT	10440
CAAAGAAAGTC	CATCAGTTCA	CGCGCCAAGG	CTGGATTGTT	CTCAACAGGT	AGGTATCCAC	10500
CTTGTGAG	TTCCACTTCG	ACTTCCATAT	CAAAGGCAGC	TGCAACCC	TCTGCAACTG	10560
TTTTTACCC	CTTTTGAC	AAGAGACTCA	TGTCCTGTGT	CAAGGCACGA	ATAGTTCCAT	10620
GTAAAAAAAGC	TGTGTCTGTG	ATGACATTGT	TGGTGGTTCC	AGCTTGAAA	ACGCCAAGG	10680
TCACCACTGC	TCCCTCGATT	GGGTTGACAT	TGCGGCTAAC	AACTGACTGC	ACTTGGGTCA	10740
CAAAGTAACT	AGCCGCCACC	AAGGCAGTCAT	TGGCTTCATG	AGGAAAAGCT	GGTGGCCAC	10800
CTTTGCCTTT	GAAACGGATC	TTCACCTCGC	AAAGTCCTGC	AAAGAGTGT	TGAGTATTAG	10860

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TCGCAATCTG	GCCGACTTTC	AAATCTGGAC	GAACATGGAG	ACCATAGAAT	TGATCTGGCA	10920
ACCAATCTCC	AAAAGCACCG	TCCTCATACA	TGAGCATACC	ACCAGCTTCA	TTTTCTTCAG	10980
CAGGCTGAAA	TAGAAAGAGC	AGATTATTCT	TGGGTTGCTC	CTCAAGGGCG	CGCTCAAGAC	11040
AGCCTAAGGC	AATGGTCATA	TGAAAATCAT	GGACACAGGC	ATGCATGCGA	CCTTGGTGT	11100
GAGAAGCAAA	AGGTAGACCT	GTGTTGTCGA	CGATAGGCAG	GCCATCAATA	TCTGTCCGCC	11160
AACCAATGGT	TCGCTCCGGC	TGACTTCCT	GCAGGGTAGAC	CAAATCCCT	GTCCGCCAAG	11220
TACGAATTTG	AACAAAATCC	TTGCCCGTAG	TCAATTTCTC	AATCACATCC	AGCAAATAAG	11280
CCTGAGTCTT	GAACCTCTCC	AAGCCAATCT	CTGGAATCTG	GTGTAATCT	CGTCTAGTCT	11340
GAATCAAATC	TAACATCTAT	CTGTCCTCCG	ATATAGCAGA	AAGAGGCTGG	AAAAGGGTT	11400
CCGCCTCTTT	TTTACTTTA	CAATTACAAG	GTACGAAGCG	CATCCTCTAG	CGCTGTTTT	11460
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TTTTCTGGGA	CATCTTGGGT	AAACAATAGCT	CCTGCTGCGA	CAACTGAACC	ACTACCGATT	11580
TGGACTCCTT	CGATAACCAC	TGCATTAGCA	CCGATAAGAA	CATTGTCTCC	GACACGGACT	11640
GGTCAGCAC	TAGCTGGCTC	AATCACACCT	GCCAAAACGT	CACCTGCACC	AACGTGGCTA	11700
TTTTTCCAA	CGATGGCACG	GCCACCAAGG	ATGGCACCCA	TGTCAATCAT	GGTCCAGCA	11760
CCGATTTCA	CACCGATATT	GATAACAGAT	CCCATCATGA	TAACAGCATT	GTCACCAATT	11820
TCCACCTGGT	CACGGATAAT	CGCACCTGGC	TCGATACGAG	CGTTGATAGC	ACGCTTATCT	11880
AGCAAAGGAA	CTGCAGAATT	ACGAGCATCT	TGCTCGACAA	CATAATCTTG	ATTTCTTAC	11940
AAACCTTCAA	GAAGCGGAGC	CACATCCTTC	CAGTCTCCGA	ATAGGACATT	TCCTAGTTG	12000
ACAACAGAGC	TAGGCACAGC	AGTTGCGAGT	TGCCCCCTCAA	AGGTTACTTT	GACACTGGTT	12060
TTCTTTTCAG	CATTGGCGAT	AAATTGGATA	ATTTCATTGAG	CGTTCATTTC	TGTAGCAGTC	12120
ATAGGTG						12127

(2) INFORMATION FOR SEQ ID NO: 149:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 12566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 149:

CCATCCTTCT	GTTGATGTGA	CAGGAATGAT	GATAATCAA	CCAGTAGCTA	GTCGCGAAGA	60
GGTGACAGAG	GCTTGAGTC	ACTTGGCGGT	AGAGCACAAT	AGTCTCATTG	CTCGTCGAAT	120